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Case study on Mainland Regional High School's pilot program on block scheduling

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CASE STUDY ON MAINLAND REGIONAL HIGH SCHOOL'S

PILOT PROGRAM ON BLOCK

SCHEDULING

by
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A Master's Thesis

Submitted in partial fulfillment of the requirement of the
Master of Arts Degree of the Graduate School of
Rowan University
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Approved by _____
Professor

Date Approved _____ *May 1999* _____

Abstract

Matthew A. Jamison

Case Study on Mainland Regional High School's Pilot Program on Block Scheduling
1999
Dr. Ronald L. Capasso
School Administration

The purpose of this case study was to discover and evaluate the advantages and disadvantages of block scheduling at Mainland Regional High School. The major focal point of this case study was the perceptions on block scheduling of teachers, students, and parents.

This study blends the richness of qualitative research with the range of quantitative research. Approximately 180 sophomore students participated in the pilot program. Four teachers volunteered to teach the classes in the pilot program. The students completed a pre and post survey. At the conclusion of the first semester, random students were chosen to be interviewed. All the participating teachers completed a pre and post interview. The parents of the participating students also were surveyed. Members of the school administration were interviewed at the conclusion of the first semester. A five-point Likert scale was developed and utilized for the surveys.

In general students and teachers enjoyed their experience in block scheduling. Parents were also somewhat receptive to the idea of block scheduling. It is noted that the pilot program was a combination of traditional and block scheduling. This seems to be the path Mainland Regional High School should travel.

Mini-Abstract

Matthew A. Jamison

Case Study on Mainland
Regional High School's
Pilot Program on Block
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The purpose of this case study was to discover and evaluate the advantages and disadvantages of block scheduling at Mainland Regional High School. In general students and teachers enjoyed their experience in the pilot program. Parents were somewhat receptive to the aspects block scheduling would bring to the school.

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Chapter One

Introduction

Focus of the Study

Education in America was addressed by the reforms of the 1980s. However, in large measure the various attempts to "fix" education failed to produce the substantive changes required to improve upon the quality of education offered in American public high schools. Presently, the restructuring movement aims to alter the institutional framework of American high schools. The major element of this restructuring is alternative or macroscheduling. Educators are realizing that scheduling is an effective resource for significant change. During the past ten years, secondary schools across the country have changed from the traditional daily six to eight period schedule to "block schedules," in which students meet daily for three or four classes of longer duration. The pace of growth in the number of schools implementing block schedules has been dramatic. Considering Cawelti's 1994 national survey, it is estimated that more than fifty percent of high schools in the United States are either using or considering some form of block scheduling. American high schools are beginning to experience substantive changes, changes that often challenge years of ritual and tradition in a powerful socializing institution.

Mainland Regional High School began researching block scheduling and the possibility of implementing a pilot program, in the spring and fall of 1997. In September

1998, Mainland Regional High School implemented a pilot program on block scheduling. The focus of this research study will be the evaluation of the pilot program on block scheduling.

Purpose of the Study

After the initial research on block scheduling in the spring of 1997, the superintendent recommended to the Board of Education that a pilot program be developed and implemented for the 1998-1999 school year. The pilot program was designed to have a one year, two semester block schedule for sophomore biology and United States' History I classes. Being micro in scope, a concise and focused evaluation of the pilot program is essential before the Board of Education can consider a full or expanded block schedule.

This case study will result in an evaluation of Mainland Regional High School's pilot program on block scheduling. This study will focus on teacher perceptions, student perceptions, and parent perceptions in the block environment. The purpose of this study is to discover and evaluate the advantages and disadvantages of block scheduling using the pilot program in a case research design. This research study proposes that the additional instructional time provided by block scheduling will improve the learning climate of the school and increase teacher and student satisfaction.

Definitions

The setting and the topic of this research study contain some unique terminology. For a better understanding, the following is a definitive description of the terminology used.

~ macroscheduling - A reformation in school scheduling. A larger amount of time per class is incorporated into the daily schedule. Classes are generally completed in a semester.

~ traditional scheduling - This type of scheduling is recognized for the most part as the norm. The traditional schedule structure has 30 to 40 minute classes that meet 4 or 5 times a week for both semesters.

~ modular scheduling - A type of alternative scheduling. This type of schedule is structured around the concept of modular blocks of time that vary in length. This type of scheduling provides some flexibility in course offerings and space utilization.

~ block scheduling - The most popular type of macroscheduling. Classes are scheduled in blocks of time, generally 80 to 95 minutes in duration. The classes only meet for one semester. A full block schedule would have 3 or 4 courses a semester. The block schedule also provides some flexibility in course offerings and space utilization.

~ pilot program - Mainland Regional High School's program on block scheduling that is to be evaluated by this research study.

~ academic level - The level of the courses being utilized by the pilot program. Mainland Regional High School has three course levels; honors, academic, and general.

~ learning climate - The school and classroom setting in which the delivery of instructional services occurs.

~ cooperative learning - A student oriented learning strategy. The teacher acts as a facilitator to learning tasks that involve students working together.

~ classroom management - The process in which a class is organized and a healthy learning climate is established and maintained.

~ instructional technology - Types of technology, i.e. computers, that aid in the delivery of instructional services and also serve as a learning tool.

Limitations of the Study

The research study on the pilot program on block scheduling is confined to the social studies and science departments of Mainland Regional High school. A total of four teachers will participate in the study and approximately 180 sophomore students. The conclusions can be generalized to other disciplines of study because the research study is not concerned with the specific subject matter taught. The conclusions on the student perceptions on block scheduling can only be generalized to the tenth grade academic level students because only this level participated in the study. Even with the consideration that the experience of the participating teachers ranged from 3 years to 32 years, the teacher perceptions cannot be generalized to the professional staff. The perceptions of the parents can be generalized to the entire district because the surveys included questions about block scheduling in general not of their child's experience exclusively. Mainland Regional High School is a one building school district rendering the conclusions applicable to the entire district.

Setting of the Study

Mainland Regional High School District serves the communities of Linwood, Northfield, and Somers Point of southeastern Atlantic County, NJ. The three communities are similar in the sense that the casino industry provides a significant amount of employment to the area. There are three major hospitals in the immediate area and several shopping centers. Linwood is categorized as a professional community with minor commercial aspects. Somers Point is more of a "blue collar" community with

major commercial interests. Northfield also has commercial aspects as well as a significant professional population. Somers Point students represent approximately 41 percent of the student population, followed by Linwood 31 percent and Northfield 28 percent. The Board of Education has four representatives from Somers Point and three each from Linwood and Northfield. The school budget has been defeated six times during the 1990s. The budget has passed the last two consecutive years. The support for the educational program at Mainland Regional High has increased drastically over the last couple of years.

Mainland Regional High School has approximately 1200 students, 105 professional staff members, 30 support staff members, and 9 administrators. The racial/ethnic composition of the students is approximately 85 percent white, 5 percent Hispanic, 5 percent African American, 4 percent Asian American, and 1 percent Native American or Alaskan. There are 2 African Americans, 2 Hispanic, and 1 Asian American professional staff members. The professional staff includes 2 doctoral degrees, 23 masters degrees with 8 additional staff members scheduled to earn their masters degree in the Spring of 1998. The average salary for professional staff members is approximately 41,000 dollars. The Mainland Regional Education Association is the bargaining agent with the Board of Education and a good working relationship exists.

The primary goal of Mainland Regional High School is to prepare responsible students to actively participate in their communities. The school boasts high academic achievement, a family school climate, innovative programs, outstanding artistic and athletic programs, and a very fine student body. The integration of technology into the curriculum, a total interdisciplinary curriculum, and adequate facilities are essential

curricular goals. The developmental needs of the students are met in a variety of ways. Most courses are college preparatory in nature and thus designed to meet the needs of students for post-secondary education.

The New Jersey Department of Education ranks school districts according to socioeconomic factors, such as median family income, unemployment rate, poverty rate, and educational attainment. This enables similar schools to be compared in an equable light. Mainland Regional High School is basically in the middle, with a District Factor Group of (FG). Mainland Regional High School maintains a high percent of students passing each section of the HSPT exams the first time, surpassing both the District Factor Group and the State averages. Mainland Regional High School offers 21 Advanced Placement courses. The Advanced Placement courses are open to all students, and all students in the courses take the Advanced Placement exams. In 1997-1998 a total of 308 Advanced Placement exams were taken by Mainland students. Mainland offers satellite courses like Japanese and is the homebase for Interactive TV class, offering courses like AP European History, with other school districts in Atlantic County. The average SAT verbal score for Mainland students is 518, and the average SAT math score is 527. The State average for the SAT verbal is 497, and the SAT math is 511. Mainland scores are most impressive considering 80 percent of the students take the exams compared to the state average of 69 percent. Mainland sent 80 percent of its 1998 graduating class to higher education institutions. Of the 80 percent, 49 percent enrolled in 4-year colleges or universities and 31 percent enrolled in community colleges.

Technology is of great importance to the Mainland Regional High School community. The Library/Media center is the hub of the school with a popular CD ROM

lab. Electronic field trips to various areas of the world increase student learning. The use of the Internet, media retrieval system to all classrooms, computers throughout the building, a SERC satellite, an ITV community partnership, a TV production course which broadcasts information to classrooms as well as into the community on MRHS Channel 13 are some applications of technology. There are 44 clubs and activities offered to the students. Academic clubs include the mock trial team, the science league, the math league, the academic team, and academic decathlon: all of whom are always successful in local and state competitions. Athletic teams involve the great majority of the student population. Over 700 varsity letters were awarded to students in 1997. The Athletic teams excel and have won many state titles. The Parent Teacher Organization meets on a monthly basis, hosting many informative sessions. In the Spring of 1998, Mainland Regional High School was selected as a Blue Ribbon School by the U.S. Department of Education, Office of Educational Research and Improvement.

Significance of the Study

This research study is a very worthwhile and a significant endeavor for the Mainland Regional High School District. The Board of Education and the administration is seriously considering a radical change in the institutional framework of the district that would greatly affect the delivery of instructional services. Based on this study's conclusions on block scheduling at Mainland Regional High School, the change may reform a traditional scheduling approach to an innovative time efficient approach.

A pilot program has been developed and implemented at the school. This action research design will be based in research. Data collected from students, teachers, and

parents involved in the pilot program on block scheduling will be utilized. Conclusions will be arrived at and reported to the school administration and Board of Education.

Organization of the Study

The remainder of this research study is organized into four components or chapters. Chapter 2 contains a review of the literature on the research question. The review of literature will give credibility to the study's intended goal. Chapter 3 contains the design of the study. This chapter will have five sections; a description of the research design, a description of the development and design of instrumentation, a description of the sample, a description data collection, a description of data analysis. Chapter 4 presents the findings of the research study. It also contains an explanation of the findings. Chapter 5 contains the major conclusions and their corresponding implications. It also contains recommendations on the research topic and impressions the study made on the researcher.

Chapter Two

Review of the Literature

In the 1990s, school reform in America centered on macroscheduling. Educators realized that scheduling, for the most part, has been an untapped resource for significant change. Secondary schools across the country have changed from the traditional seven period school schedule to "block schedules," in which students have three or four classes of longer duration.

In September 1998, Mainland Regional High School implemented a pilot program on block scheduling. The pilot program was designed to have a one year, two semester block schedule for sophomore biology and United States' History I classes. The entire sophomore class did not participate in the pilot program. However, the largest group of the three course levels, the academic level, was chosen as the pilot group. Four teachers, two from the science department and two from the social studies department, volunteered to teacher in the pilot program.

The purpose of this study is to discover and evaluate the advantages and disadvantages of block scheduling using the pilot program in a case study research design. This study will evaluate teacher perceptions, student perceptions, parent perceptions, on the effects of the learning climate in the block environment for the school and community to review. This research study proposes that the additional instructional time provided by block scheduling would improve the learning climate of the school and increase teacher and student satisfaction.

The purpose of this review of the literature is to support the framework of this study. Research is to needed define terms used in this study and to discover any relevant

studies done on evaluating specific effects of block scheduling. This study requires research on the advantages and disadvantages of block scheduling from the perspective of students, teachers, and administrators. The research review will limit or focus these perspectives on school climate, teacher and student satisfaction, and discipline. A review of the literature allows an insight into research methodologies on the topic of block scheduling. Methodologies that adhere to sound research principles will aid in the development of this study's research design. Based on the review of similar studies on block scheduling, instrumentation like questionnaires, and structured interview questions will be developed and formulated to the specific focus of this study. A review of the literature will substantiate the importance of this study to the Mainland Regional High School District.

<u>Traditional Schedule: Definition</u>

In 1892, the National Education Association's Committee of Ten established the foundation for the rigidly structured high school schedule. The result was today's traditional secondary school schedule. This committee's recommendation occurred over a hundred years ago during the beginnings of this nations industrial society. Though the philanthropy of Andrew Carnegie, the development of the "Carnegie Unit" early in the 20th century helped to standardize the every-day-schedule for the nation's high schools.

> The Carnegie Foundation proposed a standard unit to measure high school work based on time. A total of 120 hours in one subject – meeting 4 or 5 times a week, for 40 to 60 minutes, for 36 to 40 weeks each year – earns for the student one "unit" of high school credit. "The Carnegie Unit," became convenient, mechanical way to measure academic progress

throughout the country. And, to this day, and indeed this bookkeeping device is the basis on which the school day and indeed the entire curriculum is organized. And at some schools, adding up Carnegie units seems to be the main objective (National Education Commission on Time and Learning, 1994).

This scheduling structure, the traditional schedule, begun over 85 years ago has proven durable and very resistant to change. Communities, teachers, students, and administrators recognize this schedule as the norm.

Advantages and Disadvantages of Traditional Scheduling

The traditional scheduled has served this country's educational needs for the better part of this century. Parents either experienced this scheduling structure or were well aware that their children would receive instructional services in six to eight subject areas on a daily basis during the school year. The school administrator easily organized disciplines in units or departments for clear lines of command and institutional needs. Teachers were viewed as subject specialists in a particular department operating in self-contained classrooms. This rigid organizational structure created and fostered a teaching culture that placed staff members in isolation, acting as teacher-administrators of a particular class. A study by Gary Kruse and Mike Zulkoski (1997) found that many teachers preferred this arrangement.

The typical high school still operates on the traditional school schedule. Students race from one 40 minute class to another, attending as many as eight classes with eight different teachers on a daily basis. Single – period schedules not only fragment the school day for both students and teachers, but they also affect the manner in which

curriculum is organized and delivered (Canady, 1996). Teachers rush through the delivery of instructional services to complete the period's objectives before the bell rings. A teacher would often find himself presenting until the bell rang, then saying "Remember all this stuff – tomorrow we'll practice it" (O'Neil, 1995). Research indicates that teachers are experiencing frustration in their attempts to incorporate technology into their traditionally scheduled classes.

A business education teacher states:

> It seemed like I never got done what I wanted to get done, for example,
> the logistics of trying to get 32 students up and running on 32 computers,
> completing their assigned work, closing down before the bell rang, leaves
> me with little time to help the students...I felt like I was always running.
> (O'Neil, 1995).

The allotted class time in the traditional schedule was actually shortened in the 1980s because the graduation requirements in many states was increased to as many as 24 Carnegie units for an academic diploma. This reduced the opportunity to schedule electives. To address this problem, the six period day was expanded a to seven or eight day period without lengthening the school day. An English teacher says he found the short class periods "stifling and confining, both for me and my students" (O'Neil, 1995). Research in the 1980s, supported the view that the traditional schedule does not allow teachers to utilize time efficiently. One teacher freely admits:

> Time is the currency of teaching. We barter with time. Every day we
> make small concessions, small tradeoffs, but, we know it's going to defeat
> us (Gilman, and Knoll, 1984).

Researchers concludes that 38 percent of the time in the typical school day students are engaged in productive academic activities (Karweit, 1985). Recorded observations conclude that only 60 percent of the school day is actually available for instruction (Rossmiller, 1983). It is estimated that the average time devoted to the delivery of instruction during the typical school day is less than 30 percent (Gilman and Knoll, 1984).

A significant study, the Prisoners of Time, added, "the degree to which today's American school is controlled by the dynamics of the clock and calendar is surprising, even to people who understand school operations (National Education Commission on Time and Learning, 1994)." Several observations regarding the rigidity of time schedules in public schools illustrates clearly this point:

~With few exceptions, the school year lasts nine months, beginning in late summer and ending in late spring.

~Schools typically offer a six-period day, with about 5.6 hrs of instruction.

~No matter how complex or simple the school subject, literature to shop, the school assigns an impartial national average of 51 minutes per class period, no matter how or poorly students comprehend the material (National Education Commission on Time and Learning, 1994).

Time is the governing factor of the entire school community. An impersonal, factory-like environment is created by the assembly line, single-period schedule. The task of learning is challenging for the students, who are expected to adjust to the differing academic standards, behavior codes, teaching styles, homework requirements, and tests of six to eight different teachers daily. Few adults could survive the impersonal, hectic pace of

students in the typical single-period high school (Canady and Rettig, 1995). Carrol (1990) states that at no other time, whether at school or at work, is anyone placed in such an impersonal, unproductive, frenetic environment as the typical high school.

The impersonal, factory-like environment created by traditional scheduling effects school climate. From the perception of administrators, releasing thousands of adolescents into narrow hallways eight times each school day for 4 or 5 minutes to go to the bathroom and to their lockers creates noise, stress, and discipline problems. The rush from class to class also affects students and teachers. A teacher states, "Under a traditional schedule, students and teachers are rushed from class to class, contributing to a stressful climate (O'Neil, 1995)." School discipline is also affected negatively by teachers' large student loads and short periods. Teachers are responsible for 100-180 students find it difficult to develop the close relationships necessary to avoid student-teacher challenges (Canady, 1996).

Alternative Scheduling: Definition

J. Loyd Trump designed the flexible modular schedule in 1959. This schedule called for instructional sessions of varying length. Students would spend their time in a variety of instructional formats: large group (100 or more), small group, and individual study, depending on the needs of the students and subjects (Trump, 1959). A type of flexible modular schedule incorporates 12 "mods" that are 20 minutes or 41 minutes in length. Typically a student has a 15-minute homeroom, 8 or 9 instructional periods, a twenty-minute lunch period and the possibility of a supervised study hall. Mainland Regional High utilizes such a schedule.

Initial, early efforts employing Trump's scheduling concepts were viewed favorably by students and teachers. Research conducted by B.W. Goldman reported that both teachers and students preferred flexible modular scheduling over traditional schedules of six or seven single daily periods (Goldman, 1983). Parents and community members did not share such a favorable perception regarding this scheduling innovation. The results of flexible modular scheduling, as reported by Goldman, were at best mixed.

Based on a synthesis of over two dozen studies, student achievement in schools using flexible modular scheduling was not significantly different than student achievement in traditionally scheduled schools (Goldman, 1983). Much of the criticism of the Trump Schedule centered on student discipline. A major feature of the plan was the allocation of thirty to forty percent of the school day to unscheduled student time for independent study and individual tutorials. Though this concept was consistent with a popular notion of the sixties, individualization of learning, student discipline problems were cited as the major factor for the discontinuation of the flexible modular schedule. Teaching methods and teacher behavior posed another area of objection. Teachers often found it difficult to tailor their teaching practices to the varying lengths of instructional time. Goldman's final conclusion turns out to be a prophecy.

> Some form of flexible, adapted scheduling is a sophistication which we probably cannot afford to overlook; the lesson to be learned from the flexible modular schedule experience is that flexibility must be real, must produce significantly better results than any system it replaces, and must not cause more problems than it solves (Goldman, 1983).

Block Scheduling: Definition

In April 1983, the National Commission on Excellence in Education delivered its famous report to the nation, informing us that the weakness of our schools menaced our well being as a country. A Nation at Risk called for the emphasis on a new set of basics, the need for a more intensive school experience for all young people, and the need for a better trained teaching profession in the nation's schools (National Commission on Excellence in Education, 1983). The theme of an intensive school experience became the battle cry of scheduling reformers. Learning in America is a prisoner of time. For the past 150 years, American public schools have held time constant and let learning vary (National Commission on Time and Learning, 1994). Specific recommendations by the National Education Commission on Time and Learning (1994) having direct implications for scheduling the school day include:

~Schools should be reinvented around learning and not time.

~State and local school boards should work with schools to redesign education so that time becomes a factor supporting learning, not a boundary marking its limits.

~Schools should provide additional academic time by reclaiming the school for academic instruction.

~Teachers should be provided with the professional time and opportunities they need to do their jobs well.

The research concerning time and learning is still debated today. However, a consensus has been reached that too much of the school day is wasted on administrative processes, student distractions and discipline, and academic downtime.

The conceptual examination of high school scheduling revealed its influence on time, sequence, curriculum, instruction, teachers, students, and space (Caroll, 1994). The "Copernican Plan" offers possible solutions to the scheduling problem set forth by the "Carnegie Foundation a hundred years earlier. The concepts of macroscheduling and intensive scheduling are primary to J. M. Carroll's scheduling plan. In theory, the outcome of the Copernican Plan should be schools that are more successful (Carroll, 1990). Classes are scheduled in blocks of time of ninety minutes, two or four hours per day, and for only part of the school year, such as 30, 45, 60 or 90 days per class (Carroll, 1990).

Advantages and Disadvantages of Block Scheduling

Throughout the nineteen nineties the advantages and disadvantages of block scheduling has been the subject of research. The purported advantages of block scheduling have included, a better school climate (Buckman, 1995), options for early graduation (Edwards, 1995). Other advantages listed by Jeffrey Sturgis (1995) include: more effective use of the school day, decreased class size, increased number of course offerings, reduced student to teacher class ratio, and the ability of teachers to use more process – oriented strategies. Block scheduling is an innovation directed at the utilization of time.

Research on block scheduling indicates that teachers experience greater satisfaction in their job. The most powerful element in terms of satisfaction with block scheduling overall is improved working conditions. Teachers like having fewer students to work with at a given time, more planning time, fewer class preparations, and a more relaxed daily schedule (Hurley, 1997a).

One science teacher said:

...it's a welcome relief, in terms of preparation, I have three this semester.

Before, with the seven period day, it was conceivable to have even more.

Now, most teachers have one preparation, generally no more than two.

A math teacher commented:

Well, it benefits me in that I have less classes to prepare for in the given

time frame. I have a 90-minute planning period as opposed to a much

shorter one with more class loads. I have less students in the semester

than I had all year (Hurley, 1997a).

In addition to improved working conditions, teachers reported that the opportunities to try

new teaching methods are also very rewarding.

An English teacher said:

I've done a lot more hands-on activities with the classes...I try to divide

my class into about three or four different activities for each class period.

A science teacher remarked:

There's less lecture and more hands-on activities. The kids are working

on the board, watching demonstrations, or doing demonstrations

themselves...more physical activities...You see more kids moving around

the classroom than you used to.

Administrators also report more effective methods of delivering instructional services. In

visiting classrooms, a high school principal says, "I definitely see a wider variety of

activities being used, such as cooperative learning, hands-on projects, and other strategies

aimed at encouraging student involvement (O'Neil, 1995). From the student perspective

the academic advantages of block scheduling are apparent. The following testimonies reflect this perception:

> As far as the 4x4 schedule, we have a whole lot more time to do labs and group work stuff. Before we never had time to do that.
>
> The advantages are, you know, that you have more time one-on-one with the teacher...and you don't have as much to keep up with because you only have four classes (Hurley, 1997b).

Teachers contend that school climate improves as a result of block scheduling. Observations and findings concerning the positive impact of block scheduling on school climate demonstrate the widespread interest in this form of instruction. Teachers get to know their students better since fewer total students are seen each day. A Latin teacher comments, "It's a whole lot easier managing 75 kids, I get to know then better (O'Neil, 1995). Administrators also recognize the improved climate in block scheduling. "Block scheduling personalizes the high school and allows teachers and kids to know one another better (O'Neil, 1995)." Discipline problems have dropped at many high schools using block scheduling. " You might think that with 90 minute classes, kids would tear down the walls," says a principal after discovering discipline referrals had decreased at his school (O'Neill, 1995). Reported improvements to school climate in the block environment:

> ~Initially, there is greater stress for teachers until they learn how to teach in a larger block of time, but eventually the school environment becomes less stressful for both teachers and students (Canady and Rettig, 1996).

~Both teacher and student attendance will likely improve (Schoenstein, 1995).

~The number of discipline referrals to the office is reduced by 25-35 percent; in one school in Florida, the number was reduced by 50 percent (Carrol, 1994; Guskey, 1994).

The greatest advantage of block scheduling is that the variations are endless and may involve reconfiguring the lengths of terms as well as the daily schedule (Canady and Rettig, 1996). Any block schedule can be modified to meet the specific needs of a particular school.

Adopting a block schedule is not problem–free. Educators adopting various block schedules report several problems. Canady and other researchers say that staff development on instructional techniques and curriculum development is most critical to the success of block scheduling. In a comparative study by Salvaterra and Adams (1995), a new principal offered no support or staff development to teachers. As ideas, energy, and resources became strained, more teachers voiced their desire to return to the traditional schedule.

Research indicates that students have some concerns and negative comments about block scheduling. Some students felt teachers were not changing their methods effectively. Students pointed out that some teachers lecture for too much of the ninety minutes. The following quotes illustrate student concerns over block scheduling:

Sitting longer in the classroom-that's a disadvantage and an advantage; it depends who your teacher is.

Another student said:

Some people can get tired of sitting in class that long and listening to the

same teacher every day. And some teachers will lecture, making it boring

and don't get the students into it (Hurley, 1997b).

Other students reported they did not like teachers trying to cover too much material in

one semester. These concerns usually centered around courses that require standardized,

state mandated exams. The common concern was stated in the following:

In the Englishes, and stuff, they are always saying, 'we're going to have to

get through it by this date. If not, then you won't know this and do poorly

on the exam (Hurley, 1997b).

Several students mentioned that if they missed class it was difficult to stay on pace.

Under block schedule one absence is equivalent to two or more classes under the

traditional schedule. Similarly, students also commented that they have tests more

frequently because classes cover just 18 weeks. Some students said:

I'm not an athlete, but I know a lot of them have to leave to go to ball

games away, and since the classes are only for one semester, it's a little bit

quicker to get behind if they don't stay caught up.

A different student said:

I think the studying has really increased because the more time you have

in class, the faster you move through a unit and the sooner you'll have a

test or quiz (Hurley, 1997b).

Teachers also pointed out that absent students fall behind more quickly in the

block schedule. This realization has affected teacher attitudes regarding the block

schedule. Teachers also voice concerns about the limits on field trips. Teacher

comments on the attendance issue:

> When students are absent from class, for whatever reason, they're missing
>
> a day and a half of class, and come back and can't believe they have to
>
> make up all this work...so, when they're absent, they miss more work, and
>
> its tough to make up the work and keep up.
>
> Another teacher commented:
>
> That was one of the selling points-"oh, you'll have time to do field trips
>
> and stuff like that." But if you're not one of those people who can take
>
> kids on field trips you have problems, and how will your field trip affect
>
> the other teacher's class (Hurley, 1997a)?"

Some teachers concerns about coverage run parallel with the student concerns. Teachers

contend that instead of having time for enrichment and skill development, they have too

little time to cover the required material. Most of the comments refer to classes with

state-mandated, standardized, end-of-course exams. One teacher comments:

> You have to realize that we still lose hours in block scheduling. That's the
>
> reality, so you have to keep your mind geared that, okay I have 90
>
> minutes, so I can give my students 20 minutes of homework review, now
>
> if I do, I can't get the curriculum in, and I'm responsible for an end-of-
>
> course test, which the state gives...so it really pushes me (Hurley, 1997a).

World language teachers are often the most critical of block scheduling. The criticisms

vary from the sequencing of courses to content coverage. Many foreign language

teachers feel that offerings at the first level of a course in the Fall semester of one school

year and then following with the second level course in the Fall or Spring of the next school year provides too much time between courses. They indicate the loss of learning traditionally seen in the summer break is exacerbated by an additional five months tagged onto the summer break (Shortt and Thayer, 1997). A foreign language teacher commented about covering course comment:

> I feel pressure to cover things...I find I don't feel as comfortable doing foreign language games as often with the four-period day...those are learning experiences and they're fun for the students; but I feel like I have less time to do them (Hurley, 1997a).

Beliefs about block scheduling vary. The literature on the advantages and disadvantages of block scheduling will help guide this case study. This review of the literature provides a roadmap for evaluating specific issues of the pilot program on block scheduling at Mainland Regional High School.

Chapter Three

The Design of the Study

The 1990s have seen high school leaders rediscover the potential for program improvement through macroscheduling. Mainland Regional High School has instituted a pilot program on block scheduling for the school year 1998-1999. This study uses the pilot program in a case study research model. At the start of the pilot program, there was no formal evaluation plan. This research study will be recognized as the evaluative instrument for the pilot program on block scheduling at Mainland Regional High School. This study blends qualitative and quantitative research methods through the use of surveys and personal interviews. The focus of this study will be on the perceptions of teachers, students, parents, and administrators on block scheduling at Mainland Regional High School.

This research study wanted to capture the richness of qualitative data. To achieve this, an instrument was developed which would be utilized in an interview setting. The development of this instrument was based in research of similar studies and customized for the needs of this case study. Four general program areas were specified and a set of questions was developed for the teacher interview. The four program areas were as follows: Block Scheduling, Learning Environment, Pedagogy, Technology. Open-ended questions were developed to encourage real and personal responses. The random student interview was developed to give insight and depth to student perceptions on block scheduling. The same four program areas were used, however questions from the student perspective were developed. The quantitative data for this case study was gathered by survey methods. Utilizing previous studies on block scheduling, and tailoring the

questions to the needs of Mainland Regional High, student and parent surveys were developed. Clear and concise survey questions were developed. The survey questions were developed in a way to capture the perspectives of both parents and students. A five-point Likert scale was utilized on the ten question surveys.

The population of this case study was the sophomore class at Mainland Regional High School. The entire sophomore class did not participate in the pilot program on block scheduling. The largest segment of the class was chosen as a sample of this group. This segment was the academic level biology and United States History classes. If a student registered for the two courses in the spring of their freshmen year, they were automatically blocked for one of the classes during the fall semester and the other for the spring semester the following year. Student registration also determined the parent sample population for this study. The participating teachers volunteered to teacher in the pilot program in their respective disciplines. The population sample representing the administrative perspective in this study was the building principal and the assistant principal.

The data collection approach followed a clear procedure and adhered to a planned timeframe. The participating teachers were interviewed twice during the data collection phase of the study. The first interview occurred during the third week of September. This interview focused on the basic perceptions and expectations of the teachers in the block environment. The second teacher interview focused on their perceptions of block scheduling after a completed semester. The collection of data on the student perception of block scheduling was also twofold. The student survey was completed during the first week of October. The same student survey was given two weeks after the completion of

the first block semester. Before actually conducting the second student survey, students were asked to complete the questionnaire based on their fall semester experience. Six students were selected at random, one from each blocked class, to participate in an interview at the conclusion of the fall semester. To establish randomization for the student interview, the fourth student listed on the class rosters were selected for the interview. The building principal and the assistant principal were interviewed after the fall semester was complete. The rationale for the administrative interviews occurring after the completion of the first semester is that some questions focused on discipline, scheduling problems, and parent concerns during the pilot program.

This case study will combine aspects of quantitative and qualitative research in its data analysis plan. Data will be quantified and analyzed by using a five-point Likert scale. Respondents from both the student and the parent survey were asked to check responses with a range of strongly agree, agree, no opinion, disagree, and strongly disagree. Values were assigned from 0 (strongly disagree), to 4 (strongly agree). A "no opinion" response was assigned a neutral value and resided in the mid-point range of responses at a value of 2. Therefore, any mean score over the neutral value of 2 will indicate some measure of agreement with the statement on the survey. If a response has a mean score greater than 3.50 it will indicate a measure of strong agreement with the statement on the survey. Consequently, a mean score under 2 will indicate some measure of disagreement with the statement on the survey. The closer the mean score is to 0; the response will indicate a measure of strong disagreement with the statement on the survey. The mode score will also be recorded and analyzed. The mode scores will determine if a majority consensus was measured with the statements on the student and parent surveys.

A comparison of the mean and mode scores on the pre and post student surveys will be recorded. This comparative analysis is of the utmost significance to this study on block scheduling at Mainland Regional High School. The qualitative analysis of the interviews will capture a richer description of target areas of the study. The responses to the open ended questions will be compared; similarities and significant observations by the respondents will be recorded and analyzed. This data analysis plan will produce evidence that will have a great impact on the pilot program on block scheduling at Mainland Regional High School.

Chapter Four

Presentation of Research Findings

The pilot program on block scheduling at Mainland Regional High School was implemented in September 1998. This research utilized the fall semester of the pilot program as a case study. Data was collected before, during, and after the fall semester. Quantitative and qualitative research was completed using survey instruments as well as pre and post interviews.

The data concerning student impressions on block scheduling was gathered using two techniques, surveys and interviews. According to the student survey conducted in the beginning of October, students agreed with the survey statement "A 41 minute class for 1 year is better than an 86 minute class for 1/2 year." The mean score recorded for this survey item was 2.34 and the mode score was 25% responding to the 3 value, representing the "agree" response (see table1). These scores indicate that students favored the traditional schedule over block scheduling. However, it must be noted that the mode score was not near a majority and the mean score of 2.34 is closer to "no opinion" value of 2 than to the "agree" value of 3. The post student survey conducted in the beginning of February yielded a significant change for this same statement. The mean score decreased from 2.34 to 1.87 and the mode score was 38% responding to the 1 value, representing the "disagree" response. This represented a change in student attitudes towards block scheduling after experiencing a blocked course. The mode score shifted two values on the range, 3 to 1, and increased 13%. This indicated that students felt that the traditional schedule was not necessarily "better" than block scheduling. To accurately measure student attitudes towards block scheduling, the corresponding

Table 1
Statistical Data from the
Student Survey

		MEAN		MODE	
		Pre Survey	Post Survey	Pre Survey	Post Survey
1.	A 41 minute class for 1 year is better than an 86 minute class for ½ year.	2.34	1.87	25% - agree	38% - disagree
2.	An. 86 minute class which meets daily for ½ year is better for learning.	1.86	2.24	34% - agree	38% - agree
3.	As a student, I remember key concepts better in block scheduling.	1.87	2.24	28% - agree	39% - agree
4.	Block scheduled classes give me the opportunity to participate more actively in class, such as group projects.	2.40	2.94	41% - agree	52% - agree
5.	The longer class periods allow for a stronger teacher-student relationship.	2.01	2.28	31% - agree	32% - agree
6.	The longer class periods allow me to ask more questions about assignments and/or classwork.	2.15	2.47	34% - agree	40% - agree
7.	Block scheduling allows me to concentrate more on a particular subject.	2.08	2.47	36% - agree	43% - agree
8.	I enjoy the block schedule more than the traditional schedule.	1.56	2.07	32% - agree	30% - agree
9.	As a student, a full block schedule would increase the quality of my homework because I would only have to concentrate on 4 subjects instead of 8.	2.11	2.23	32% - agree	30% - agree
10.	I would like to have all classes in a block schedule next year.	.82	1.49	60%- strongly disagree	36% - strongly disagree

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question, "An 86 minute class which meets daily for 1/2 year is better for learning" followed. The October survey recorded a mean score of 1.86, indicating a measure of disagreement. The mode score was 34% responding to the 3 value, representing the "agree" response. This data reflected a conflict in student attitude on block scheduling. The mean score indicated a negative response towards block scheduling and the mode score indicated a positive response towards block scheduling. It is noted again that the mean score of 1.86 is closer to the "no opinion" value of 2 than the "disagree" value of 1, and the mode score failed to establish a majority response. The post student survey recorded an increase in the mean score from 1.86 to 2.24. The mode increased a mere 4% to 38% and fell on the same value representing the "agree" response. This was also a significant change regarding student attitudes on block scheduling. Before the students experienced a blocked course, there were conflicting attitudes about it. However, after their experience the conflicting attitudes became stabilized and positive towards block scheduling. The mean score substantiates this fact by changing from a measure of disagreement to a score that indicates a measure of agreement. The mode score, which reflected a positive attitude, remained consistent. The student interviews conducted in February reflected a change in student impressions on block scheduling. A common student response:

At first I thought it would be absolutely horrible. But as I experienced it, I realized it was better and fun.

Another student said:

I liked block scheduling more after my fall experience because I was able to concentrate more with that class as well as do better.

Student perceptions on the different learning environment afforded by block scheduling were also measured. The pre student survey in October, recorded a mean score of 2.4 for the statement "Block scheduled classes give me the opportunity to participate more actively in class, such as group projects." A mode score of 41% fell on the 3 value, which represents the "agree" response. Both indicated a positive attitude towards the learning environment afforded by block scheduling. The post student survey confirms this positive student perception with increases in the mean and mode scores. The mean increased from 2.4 to 2.94 and the mode score remained on the 3 value but increased 11% to 52%. The increase in the mode score is significant because it indicates that the majority of respondents agree with the statement. When asked during the student interviews about diverse learning activities the students responded with positive attitudes. One student said:

We did group activities and played games that went along with our

subject. This allowed us to learn and get to know our fellow classmates

better.

A different student said:

It (block scheduling) allowed for more diverse learning activities because

you could learn about the subject the first period and then apply it in the

second period.

How students perceived the academic advantages of block scheduling was also a concern of this study. For the statement, "As a student, I remember key concepts better in block scheduling" the pre survey mean score was 1.87. This score represents a measure a disagreement. The mode score was 28% responding to the 3 value,

representing the "agree" response. Again, a contradiction regarding the said statement existed. The post student survey recorded an increase in the mean score from the 1.87 to 2.24. This score represents a measure of agreement with the said statement. The mode score also increased for the said statement from 28% to 39% and remained on the "agree" value of 3. The responses from the student interviews generally supported the survey results. A common response was as follows:

I was able to achieve better in my fall class because the periods were

longer and it helped me better understand the subject.

The assertion that student attitudes became more positive towards block scheduling after they experienced it is supported by data from the pre and post surveys. Although all the mean scores from post survey statements reflecting a positive attitude towards block scheduling measured agreement, all failed to reach the "agree" value of 3. The mode scores of the positive statements on block scheduling from the post survey all fell on the "agree" value, but only one reached a majority. With the final item on the pre and post surveys, students were asked to respond to the statement, "I would like to have all classes in a block schedule next year." The mean score on the pre survey was .82 and the mode score was 60% responding to the "strongly disagree" value of 0. This data obviously supports that students had strong feelings against a full block schedule. The mean is less than the "disagree" value of 1, and the majority of respondents "strongly disagree" with the idea of having a full block schedule. The mean score for the same statement on the post survey was 1.49. This increase in the mean is fractionally greater than the "disagree" value of 1 and numerically close to the midpoint between the "no opinion" and "disagree" values. The mode score was 39% and remained on the "strongly

disagree" response. The decrease in the mode of 21% is statistically significant when interpreting the data. It is true that the mode score remained on the same response of "strongly disagree", however the strong majority of 60% was reduced to 39%. This marks a change of attitude in favor of block scheduling by the respondents.

The cooperating teachers were interviewed in September and February. During the pre interview in September, teachers were asked about their general impressions about block scheduling and the increase in instructional time it affords. The common response to block scheduling in general was that it could be beneficial to learning if teachers are prepared to change for the change. The increase in instructional time was viewed as an advantage. The main concern was keeping students on task for the duration of the period. One teacher remarked:

> The increase in instructional time is a positive for student activity. The opportunity to work with smaller groups allows for more personable relationships and individual instruction.

When asked about their impressions of block scheduling after their fall experience all reacted in a positive nature. One teacher enjoyed his experience but noted the importance of teacher training. He said:

> I feel that we have just touched upon how block scheduling can be advantageous. I think more time must pass before we are teaching in the most advantageous way. In-service and more training maybe.

The teachers were asked pedagogical questions about block scheduling. When asked about methods of instruction and effectiveness during the pre interview, all

teachers mentioned that cooperative learning methods would be most effective, while long episodes of lecture would be least effective. On science teacher remarked:

> My teaching methods will be altered, but not drastically. I'm looking
>
> forward to extending my labs beyond the one or two day a week format.
>
> More enrichment activities will go along with the experiments.

During the post interview teacher were the question, "How was your delivery of instruction altered in the block environment?" The common responses centered on student-centered activities and projects. However, one teacher did find some difficulty with the alteration. He said:

> I found it difficult to lecture and set up enough hands on activities to
>
> match the textual content. The long period of time made if difficult.

Research indicates that one of the greatest advantages of block scheduling is incorporating different technologies into the learning experience. The cooperating teachers were asked questions about technology and block scheduling. During the pre interview all of the teachers spoke of the opportunity to incorporate more and different technologies into their classes. The media center (library), Internet, CD ROMS, and videodiscs were all mentioned. Some of the teachers did voice a concern about access to the technologies. A social studies teacher had the following concern:

> Technology will be great with block scheduling. The opportunities are
>
> endless. My only concern is availability and training. We have no
>
> computers in the classroom, which means the class will have to go to the
>
> media center. The media centered is also used by other classes and study

halls, that's OK but scheduling for use and time become factors to be considered.

The response from teachers about technology during the post interview included success and some frustration. Many spoke of incorporating the Internet into research efforts. Another teacher remarked how CD ROMS enriched the content. One teacher commented:

> Technology played limited role in my blocked class. We used the
> videodisc quite often. Research technology did not always work, and we
> often ran out of time for a particular activity.

The teacher pre and post interview questioning on technology resulted in the greatest challenge for them. Their success and failure depended on two variables: availability and training.

Data on the impressions of parents on block scheduling was also collected. The parents with students participating in the pilot program on block scheduling were asked to respond to a survey that they received in the mail. The survey was similar to the student survey and used the same Likert scale. Along with the survey was a letter explaining the intent and a pre-addressed return envelope (no postage necessary). The return rate to the survey was 53%. To measure the parent impression on traditional scheduling versus block scheduling the first statement asked was, "A 41 minute class for 1 year is better than an 86 minute class for 1/2 year." The mean score was 2.46, indicating a measure of agreement with the statement (see table 2). The mode score was 40% responding to the "agree" value of 3. Parents are partial to the traditional schedule, however the mean score and the failure to reach a majority mode score indicated a weak

Table 2
Statistical Data from the
Parent Survey

		Mean	Mode
1.	A 41 minute class for 1 year is better than an 86 minute class for ½ year.	2.46	40% - agree
2.	Preparing for 3 major classes (and possibly 1 elective) for ½ year is better than preparing for 5 major classes (and possibly up to 3 electives) for 1 year.	2.38	40% - agree
3.	As a parent, I feel block scheduling improves the learning environment.	2.13	35% - agree
4.	Block scheduling is a more efficient use of time.	2.27	46% - agree
5.	As a parent, I feel block scheduling improves the quality and quantity of homework.	2.06	31% - agree
6.	Block scheduling creates a stronger teacher-student relationship.	2.44	48% - agree
7.	Block scheduling is better suited for including technology in classroom instruction.	2.75	48% - agree
8.	As a parent, I am concerned about the opportunities for students to choose electives in a full block schedule.	2.35	42% - no opinion
9.	As a parent, I feel MRHS should investigate the possibility of expanding the current block schedule.	2.23	46% - agree
10.	As a parent, I would like more information about block scheduling.	3.06	50%- agree

measure of agreement. The parents were then asked to respond to the same basic idea from a different perspective with the statement, "Preparing for 3 major classes (and possibly 1 elective) for 1/2 year is better than preparing for 5 major classes (and possibly 3 electives) for 1 year." The mean score was 2.38 and the mode score was 40% responding to the "agree" value of 3. The results from the two items are statistically similar. When analyzing the two items together the conclusion that parents are undecided about block scheduling is valid. The parents were also asked about the relationship between technology and block scheduling with the statement, "Block scheduling is better suited for including technology in classroom instruction." The mean indicated a measure of agreement with the statement as it score was 2.75. The mode score was 47% responding the "agree" value of 3. Based on the two scores, parents agree that block scheduling offers greater technological opportunities in the classroom. The parents with children participating in the pilot program were then asked about the future of block scheduling at Mainland Regional High School. The statement, "As a parent, I feel MRHS should investigate the possibility of expanding the current block schedule" recorded a mean score of 2.23 and the mode score was 46% responding to the "agree" value of 3. The relatively strong mode score of 46% alone would indicate that parents have a favorable impression about expanding block scheduling, however the relatively weak mean score of 2.23 must be taken into consideration.

The administration was also interviewed at the conclusion of the fall semester. This interview occurred in February and focused on three issues: discipline, parent concerns, teacher issues. The discipline office reported that the amount of discipline

referrals was very low for the amount of students involved in the pilot program. One administrator commented:

> We have had no significant discipline problems with students during their actual time in a block class. In fact we had only one issue, and that was with one particular student who was cutting the blocked class.

The administration felt that for the most part the teachers involved in the pilot program were well prepared and ran well-managed classrooms. This is essential to any classroom management and more so in the block environment.

The administration reported only one parent concern that was brought to their attention. One of the participating teachers in the pilot program was a first year teacher. The parent questioned if it was prudent to assign a first year teacher a blocked course. The administration assured the parent that the department supervisor was guiding the teacher. The administration also asked the more experienced teacher participating in that department to mentor the first year teacher during the pilot program. One administrator remarked:

> I assured the parent that the teacher was not alone or abandoned. I also explained that the teacher would also be a first year teacher in the traditional schedule so from that standpoint it is a concern but not a great concern.

The collective bargaining agreement between the Board of Education and the teachers' association specifically establishes "contact time" for teachers. The pilot program exceeded the amount of time established by this clause in the agreement. This was a teacher issue that had to be rectified. An administrator explained:

This presented a real problem. The association could not and would not allow a precedent to be set. I really don't blame them. A solution was needed. The agreement was simple, a monetary solution was not feasible and they understood that, so we agreed to release the participating teachers of some of their contracted line duties.

The other teacher concern involved technology. Some teachers had a difficult time incorporating technology in the actual classroom because of a lack of hardware. The administration reported that by mid-month February, a computer was installed in the classrooms. The administration admitted this was not ideal but added that the computers were hooked up to the instructional network that included Internet and CD-ROM capabilities. Large screen TV monitors with digital capabilities were also made available for better use of the technology during the delivery of instruction.

Chapter Five

Conclusions, Implications and Further Study

The pilot program on block scheduling at Mainland Regional High School was an experiment in changing and improving the delivery of instructional services. A review of the literature warranted this experiment worthy of the time and effort, which it demanded. This case study produced informative conclusions about the attitudes of students, teachers, parents, and administrators on block scheduling. To ensure quality and success, this case study required the practice of effective leadership. This case study will also serve the institution in a real and practical sense when the community considers the future of block scheduling at Mainland Regional High School.

The results of the teacher pre and post interviews revealed the conclusion that teachers are generally satisfied with a number of aspects of block scheduling. Teachers expressed the attitude that a number of positive changes can result from block scheduling. The participating teachers remarked that block scheduling allowed them to explore topics in "non-traditional" ways. The teachers also felt that disruptions and interruptions were reduced. They also expressed an excitement over the opportunities afforded by block scheduling for incorporating various technologies into their teaching. Moving to a block schedule should be carefully initiated, driven by clear goals and expectations. Block scheduling itself will not institute change in teaching methods. Improvement in the delivery of curriculum must be centered on the idea of improving learning. This case study documents the opportunities that block scheduling gives teachers to improve their methods of instruction. This improved pedagogy will foster improved learning.

The participating teachers recognized the importance of effective teacher training. For most teachers, block scheduling is a radical change from the traditional schedule. The most difficult task is determining precisely what types of development are needed. Block scheduling requires teachers to think differently about teaching as they were trained. It is erroneous to assume that every teacher needs the same training. Identifying the specific needs of the individual teachers is imperative if a more effective use of instructional time is to be realized. This is not to say that a specific plan must be developed for every individual teacher. Development plans must be categorized by similar needs of the teachers (i.e. technology, cooperative learning, and interdisciplinary learning). The teacher's Professional Improvement Plan (PIP) could be utilized to individualize the staff development plan. Staff development must be viewed as a mechanism for reaching the goals established for improving learning in the block environment.

The teachers and student who participated in the pilot program were generally enthused and had a favorable impression on block scheduling. The student resistance to radical scheduling change would be greater if the pilot program was designed in the true 4x4 model. The pilot program included both traditional and block scheduled classes. Many schools are currently employing some type of combination scheduling. From the results of the student pre and post survey, this seems to be the direction Mainland Regional High School should pursue. The comparison of the pre and post student survey concludes that students were more favorable to block scheduling after their experience. It is essential to study the results of the specific survey statement, "I would like to have all classes in a block schedule next year." The pre and post student survey mode score for

the statement fell on the "strongly disagree" value. While it was true that the mean score for the statement on the post student survey increased to the value between the responses "no opinion" and "disagree", the conclusion is that the students involved in the pilot program favor a combination schedule over a full block schedule. The combination schedule of block and traditional will offer the flexibility the students require. The post student interviewed reflected to the concern of "sitting in the same class for 86 minutes." Students commented that they could be happy in an 86-minute class depending on the teacher. This is a common and valid remark. Students did recognize when teachers used a variety of methods, and they were bored when lectures were too long.

Administrators were pleased with the results of the pilot program. They reported few parental complaints and a low discipline referral rate for the students involved. They also reported that the block scheduling allowed for a more efficient use of space in the science labs. The main concerns for administrators during the pilot program were class absences, teacher satisfaction, and curriculum coordination.

Administrators must take on the role of facilitator for change. Based on this study, for a radical change in the educational process to be successful it needs support. This drastic change in scheduling, even when limited to a combination, requires coordination and team driven decision making. This case study documents the positive aspects of block scheduling in combination with the traditional scheduling. Administrators should be confident that a form of combination scheduling is going to continue at Mainland Regional High School. The need for substantive staff development is the major administrative concern. A staff development team should be established consisting of teachers, regardless if they participated in the pilot program. Administrators

must plan for the needed funding for staff development. Administrators will also have to address the logistics of additional teacher preparation time, teacher association concerns, and the possibility of additional staff. If the Board of Education is hit with a surprise request for funds, it will adversely effect the entire program. Most importantly, staff development must meet the needs of the teachers and encourage those teaching methods that are supported by research as being the most effective in the block environment.

According the results of the parent survey it is concluded that parents are generally receptive to the idea of block scheduling. To some degree, the parents still hold to traditional scheduling. The statement, "A 41 minute class for 1 year is better than an 86 minute class for 1/2 year," recorded a mean score between the responses "agree" and "no opinion" and the mode score represented the "agree" response. The parents are not embracing block scheduling with the greatest enthusiasm. The correct conclusion is that a full block schedule would encounter parental resistance. The data from the parent survey supports the conclusion that a combination of block scheduling and traditional scheduling would be prudent. The final statement on the parent questionnaire asked if parent would like more information about block scheduling. The result was positive with both the mean and mode scores on the "agree" response. This opportunity lends itself to the school leadership to discover community attitudes on block scheduling concerns like: homework, content coverage, cocurricular activities, enrichment programs, and testing issues.

In completing this case study, certain leadership skills were necessary. This case study was all encompassing from students and teachers to parents and administrators. A number of surveys and interviews were conducted along with meetings and in-services.

Leadership skills and effectively interacting with others was essential to the outcome of the study. Communication skills were utilized to ensure a high degree of quality data was gathered about the pilot program. Evaluative skills were needed to apply effective strategies for assessing Mainland Regional High School's pilot program on block scheduling.

Mainland Regional High School instituted a pilot program on block scheduling. Time and effort was devoted to developing the program. This case study became a valuable resource for the institution concerning teacher, student, parent, and administrator attitudes towards block scheduling. At the inception of the pilot program, the school was entertaining the idea of moving to a full block schedule. This evaluation of the pilot program has made it clear that a combination of block and traditional scheduling is more realistic and would be more beneficial to the school community. It is this study's general recommendation that if a full block schedule is still desired, then a three-year transition period be implemented. In this transition period several steps must be taken. First, a leadership team consisting of an administrator(s), teachers, parents, students, and community members must be established. It is the function of the leadership team to collectively direct the transition period. Some basic areas in need of direction are the following: communication, "mapping" out the order of blocking classes, issues of enrichment, testing issues (AP, HSPT), attendance, cocurricular activities, coordination between teams. Second, a staff development team consisting of an administrator(s), teachers, and board member(s) must be established. The Board of Education member(s) is essential because of the funding issue. The staff development team's task is to identify teacher needs and the subsequent staff developmental areas and programs. Third, an

evaluation team consisting of an administrator(s), teachers, students, and parents must be established. The function of this team is to evaluate each semester's progress in block scheduling. Fourth, a student achievement team consisting of an administrator(s), teacher(s), and guidance counselors must be formed. The basic function of this team is to monitor student achievement from year to year on state and other standardized examinations. All of the teams must be disbanded at the conclusion of each school year and reestablished for the upcoming year. This reformation of the teams will ensure ownership during the transition period. A radical change in the structure of educating students is a great endeavor. The traditional schedule is referred to as the traditional schedule because it has been around for 90 years. Changing it successfully requires time and cooperative planning.

Appendix A

Survey Instruments

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"Filmed as Bound"

Survey on Parent Attitudes toward Block Scheduling

	strongly agree	agree	no opinion	disagree	strongly disagree
1. A 41 minute class for 1 year is better than an 86 minute class for ½ year.					
2. Preparing for 3 major classes (and possibly 1 elective) for ½ year is better than preparing for 5 major classes (and possibly up to 3 electives) for 1 year.					
3. As a parent, I feel block scheduling improves the learning environment.					
4. Block scheduling is a more efficient use of time.					
5. As a parent, I feel block scheduling improves the quality and quantity of homework.					
6. Block scheduling creates a stronger teacher-student relationship.					
7. Block scheduling is better suited for including technology in classroom instruction.					
8. As a parent, I am concerned about the opportunities for students to choose electives in a full block schedule.					
9. As a parent, I feel MRHS should investigate the possibility of expanding the current block schedule.					
10. As a parent, I would like more information about block scheduling.					

STUDENT SURVEY ON BLOCK SCHEDULING

		strongly agree	agree	no opinion	disagree	strongly disagree
1.	A 41 minute class for 1 year is better than an 86 minute class for ½ year.					
2.	An. 86 minute class which meets daily for ½ year is better for learning.					
3.	As a student, I remember key concepts better in block scheduling.					
4.	Block scheduled classes give me the opportunity to participate more actively in class, such as group projects.					
5.	The longer class periods allow for a stronger teacher-student relationship.					
6.	The longer class periods allow me to ask more questions about assignments and/or classwork.					
7.	Block scheduling allows me to concentrate more on a particular subject.					
8.	I enjoy the block schedule more than the traditional schedule.					
9.	As a student, a full block schedule would increase the quality of my homework because I would only have to concentrate on 4 subjects instead of 8.					
10.	I would like to have all classes in a block schedule next year.					

Appendix B

Teacher Pre and Post Interview Questions

Pre Interview Questions and Topics for Discussion

BLOCK SCHEDULING

1. What are your general impressions on block scheduling?

2. Explain any reservations you might about the increase in instructional time afforded by block scheduling.

3. Why do feel block scheduling would be beneficial to Mainland Regional High School?

LEARNING ENVIRONMENT

1. What is your vision of the learning environment in a block scheduled class?

2. How do you expect block scheduling to change your classroom learning environment?

3. How will block scheduling change your classroom management?

PEDAGOGY

1. How will teaching in the block environment change your delivery of instruction?

2. What teaching methods do you expect to be most effective in a blocked class? Why?

TECHNOLOGY

1. What do you feel are the roles of technology in block scheduling?

   as an instructional tool? as a student hands on tool?

2. What types of Technology will you use in the delivery of instruction? and why?

Question and Topics for the Post Teacher Interview

BLOCK SCHEDULING

1. What was your impression of the fall semester's blocked courses?

2. How did you respond to the increase in instructional time?

3. Based on your experience do you feel block scheduling is good for MRHS? Explain.

LEARNING ENVIRONMENT

1. How did block scheduling change the learning environment of your classes?

2. How did your classroom management procedures change in the block environment?

PEDAGOGY

1. Explain how you modified your deliverary of instructional in the blocked class.

2. What teaching methods were most effective for your class?

TECHNOLOGY

1. What role did technology play in your blocked classes?

2. What types of technologies were most effective and most often used?

3. Explain how technology was more/less applicable in your blocked class?

Appendix C

Student Post Interview Questions

Questions and Topics for the Post Student Interview

1. In general, did you enjoy your experience in a blocked class?

2. How did your impression of block scheduling change after your experience?

3. What are some elements of block scheduling you like/dislike?

4. What types of activities did you most enjoy in your blocked class? Why?

5. Explain why/why not you would like a full block schedule.

6. Explain why/why not you would favor a combination of block and the regular scheduling.

Biographical Data

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