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STAFF, STUDENT, AND PARENT PERCEPTIONS
ABOUT THE EFFECTIVENESS OF BLOCK SCHEDULING
AT MILLARD WEST HIGH SCHOOL
1996-2000

Ed.S. Field Project
Presented to the
Department of Educational Administration
and the
Faculty of the Graduate College
University of Nebraska
In Partial Fulfillment
Of the Requirements for the Degree
Specialist in Educational Administration
University of Nebraska at Omaha

By
Dave A. Collins
August, 2002

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EDS Field Project Acceptance

Acceptance for the faculty of the Graduate College.
University of Nebraska, in partial fulfillment of the
Requirements for the degree Specialist in Educational Administration
University of Nebraska at Omaha

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Date *July 23, 2002*

Staff, Student, and Parent Perceptions
About the Effectiveness of Block Scheduling

At Millard West High School

1996-2000

Mr. Dave Collins, EDS

University of Nebraska, 2002

Advisor: Dr. Martha Bruckner

The design of the study was to analyze a composite of surveys from parents, staff and students about the effectiveness of 4x4 block scheduling at Millard West High School from 1996-2000. The initial and foundational restructuring efforts all started with the reconfiguration of school time (4x4 Block Scheduling) but have now included increased efforts in curriculum and instruction, technology, student advisement and staff empowerment.

Based upon the survey results, block scheduling was a positive change and was effective for students, staff and parents. Positive responses and means were lower the first two years then the last three years. Two reasons for this may be that teachers need experience teaching under a block schedule to provide effective instruction and that standardized testing, essential learner outcomes and a increase in graduation requirements made teachers go back and see how they were teaching and what could they do to become more effective. The key to success is to provide new opportunities for everyone and not be afraid to change and adjust from year to year. The results should prove useful

for all school districts in determining if 4x4 block scheduling can be effective in restructuring efforts in their own schools.

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Chapter 1

Introduction

The rigid American high school schedule did not always exist in its current state. Prior to 1892 and the work of the National Education Association's Committee of Ten, early high schools and their predecessors, Latin Grammar Schools and Academies, showed some flexibility in their school schedules (Gorman, 1971). The academies, for example and the high schools prior to about 1910 offered many subjects on 2-3- or 4-day a week schedules. The report of the Committee of Ten was the seed for the formation of the rigidly structured high school schedule, as we know it today. The result was to encourage every high school to center the work of each student upon five or six academic areas in each of the 4 high school years (Gorman, 1971). With development of the "Carnegie Unit" in the early 20th century, the every-day-period schedule became standardized.

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 a convenient, mechanical way to measure academic progress throughout the country. To this day, the device is the basis on which the school day and, indeed the entire curriculum, is organized. At some schools, adding up Carnegie units seems to be the main objective (Boyer, 1983).

The every-day-period high school schedule, which developed from the recommendations of the Committee of Ten and the Carnegie Unit, has remained

remarkably unchanged for the past 70 years. There was one attempt during the 1960s and early 1970s, to break away from this format using the flexible modular scheduling.

Trump (1959) is credited with the original design of the flexible modular schedule (FMS). The Trump Plan sought to eliminate the rigid class schedule of the traditional high school and replace it with instructional sessions of varying lengths. Based upon the time needs of individual subjects and different instructional strategies, some classes might have short meetings of one “module” or 20 minutes, while other subjects might convene for longer classes of 40, 60, 80 or 100 minutes. Trump also recommended frequent regrouping of students as their educational needs required. During its popularity in the late 1960s and early 1970s, Goldman (1983) estimates that 15% of American high schools were utilizing modular scheduling.

Ultimately in the 1970s and early 1980s, high schools returned to traditional schedules primarily because of a number of problems with flexible modular scheduling including discipline and teaching methods (Goldman, 1983). Discipline issues increased because of the amount of unscheduled student time; in addition, teachers found it difficult to tailor their teaching practices to the varying lengths of time.

By the late 1980s and early 1990s the use of FMS had faded, and many high schools began to re-examine high school scheduling practice with the intention of eliminating or reducing the dependency on the single-period schedule and moving towards the adapted scheduling model. In fact, scheduling became a critical factor in the restructuring efforts of schools across the country (Goldman, 1983).

According to Canady (1994) the goals of the High School Scheduling Reform Movement were to create high school schedules that were designed to:

1. reduce the number of class changes and movements that large groups of students are required to complete during any one school day,
2. reduce the duplication and inefficiency reportedly documented in many high schools using the single period high school schedule,
3. reduce the number of students for and with whom teachers must prepare and interact with each day and/or each term,
4. reduce the number of courses for which teachers must prepare each day and/or term,
5. reduce the number of classes, and the accompanying assignments, tests, and projects that students must address during any one-day or term,
6. reduce the fragmentation inherent in single-period schedules,
7. provide teachers with blocks of teaching time that allow and encourage the use of active teaching strategies and greater student involvement, and
8. allow students variable amounts of time for learning, without lowering standards, and without punishing those who need more or less time to learn.

Purpose of the Study

The purpose of this study was to determine the perceptions of the parents, staff and students about the effectiveness of 4x4 block scheduling at Millard West High School from 1996-2000. Starting in 1991, the plan to move to a third high school in the Millard School District came from the District Strategic Plan that stated the need for

adequate facilities to meet the mission of the district for quality teaching and learning to take place. The recommendation of the third high school task force was to move the bond issue request to the public for the funding to build a new high school. This was part of the \$35 million issue (\$30.5 million for the high school and \$4.5 million for an elementary school) taken to the vote of the public in the spring of 1992. The vote was successful and the selection of an architectural firm was done to prepare for the opening of the facility in August of 1995.

Over the next year, a great deal of information was gathered as to the optimal high school design. The best new high school facilities and programs were researched and examined, and visitations were arranged to view examples over a year period of time. In the spring of 1993 a principal, Dr. Rick Kolowski, was chosen to work with the community, architects and builders for two full years prior to the opening of the building to put into place the best possible programs and staff.

The idea of alternative scheduling came about in the Fall of 1993 in response to a national move away from traditional scheduling towards an A/B Block schedule that consists of alternative day schedules or alternate periods within the day or week. Classes usually meet every other day for extended blocks of time or a combination of alternating blocks and shortened classes taught every day for the entire year. An other alternative is a 4x4 block schedule that consists of longer periods of classes that are approximately 90 minutes and meet for only a part of the school year, usually one semester. Four courses are taught per semester.

In the Fall of 1993, Millard North and Millard South High Schools operated under a traditional seven period day schedule. Staff, parents and school board members traveled to various school districts across the country in 1994 looking at various scheduling models. After one year of research and travel, the 4x4-block schedule was submitted for approval to the Millard School Board. The 4x4 block schedule was approved in the Fall of 1994 and the design of the schedule took place that same year. By the start of 1995, various administrators were hired, and one was charged with designing the 4x4 block schedule. After Millard West High School opened in the Fall of 1995, a detailed report and evaluation of the 4x4 block schedule was presented to the Board of Education in July of 1996. The school board decided to study and analyze the effectiveness of the new scheduling component for the first 5 years to determine if it had been a success.

Theoretical Perspective

In formulation of a theoretical perspective for studying the effectiveness of block scheduling, one must look at the criticism that has occurred in the review of high school scheduling practices and a search for models better able to meet the needs of teachers and students. A variety of specific criticisms have been leveled against single-period models of high school scheduling in America. Teachers cannot effectively prepare lessons and interact with the large number of students being assigned to them on a daily basis. At no other time, whether at school or at work is anyone placed in such an impersonalized, unproductive, “frenetic environment” than in the typical high school (Carroll, 1990, p365).

Nationwide concern regarding discipline and violence (National Education Commission on Time and Learning, 1994) in schools has been an important aspect of the current critique of traditional high school scheduling. Traditional schedules can encourage an increase in discipline problems due to the number of passing periods in which students are engaged. A reduction in the number of transitions during the school day nearly always has a positive effect on a school's disciplinary climate (Fulong & Morrison, 1994).

Teachers have also played a significant role in promoting scheduling changes because, as many of them moved away from the lecture format, they became frustrated with the single period scheduled day and began to seek changes. The sense of the clock ticking is one of the most oppressive features of teaching (Boyer, 1983). It is difficult to implement creative teaching techniques in short time blocks.

The most critical issue facing schools regarding the student schedule is the fact that some students need more time to learn than others. Conscientious teachers discover that the effort to motivate the most capable students and help those in difficulty robs them of time for the rest of the class (National Education Commission on Time and Learning, 1994).

This study used the data collected from staff, students and parents from Millard West High School to determine if the 4x4-block schedule was an effective component in school reform.

Research Questions

The research questions asked by this study were:

1. To what extent does block scheduling support a friendly and supportive environment for learning?
2. To what extent does block scheduling allow more depth of study within each department?
3. To what extent do parents, students and staff find block scheduling successful?
4. To what extent does block scheduling enable teachers to be able to work more with students to meet their varied learning needs?

For the purpose of this study, the definition of success is determined by the staff, students, and parents.

Definition of Terms

Block Scheduling as used in this study consists of longer periods of classes that are approximately 90 minutes and meet for only a part of the school year, usually one semester. Four courses are taught per semester. Students have the opportunity to enroll in eight different classes in one academic year. Teachers teach three classes per semester and use one period of their day for planning.

A/B Scheduling consists of alternative day schedules or alternate periods within the day or week. Classes usually meet every other day for extended blocks of time or a combination of alternating blocks and shortened classes taught every day for the entire year.

Modified Block Scheduling allows students the opportunity to take classes of over 200 minutes in length, classes of 90 to 110 minutes in length, and classes of traditional length in the same school day.

Assumptions, Delimitations and Limitations of the Study

This study was limited to one high school where the 4x4 block scheduling was implemented from 1995-2000. It is assumed that staff, students, and parents were honest in their responses to the survey instrument.

The study may not be appropriate to all schools since it studied a brand new high school with a staff that generally wanted to come. As such, it may not be representative of a restructured school.

Significance of the Study

This study looked at the effects of 4x4 block scheduling and the impact it had on teachers, parents and students at Millard West High School. The initial and foundational restructuring efforts all started with the reconfiguration of school time (4x4 Block Scheduling) but have since included increased efforts in curriculum and instruction, technology, student advisement and staff empowerment. The results should prove useful for all school districts in determining if 4x4 block scheduling can be effective in restructuring efforts in their own schools.

Chapter 2

Review of Literature

During the past 10 years, many secondary schools across the country have changed from the traditional six, seven or eight period school schedule to “block schedules”, in which students have only three or four classes of longer duration daily. The number of schools implementing block scheduling has been dramatic. Based on Cawelti’s (1994) national survey and Rettig’s (1995) work in Virginia, it is estimated that over 50% of high schools in the United States currently either are operating or are studying some form of block scheduling.

Why are Schools Changing to Block Scheduling

The following criticisms of traditional school schedules have motivated middle and high schools across the United States to implement changes in the organization and use of time:

1. Instruction is fragmented for students attending schools having single periods.
2. An impersonal and factory-like environment is created by single period schedules.
3. Discipline problems are exacerbated by the single-period schedule.
4. Instructional possibilities are limited in short periods.
5. Traditional scheduling models do not provide varying learning time for students (Canady & Rettig, 1995, p. 4-11).

To address those and other problems prevalent in middle and high schools across the country, educators have designed new schedules that attempt to accomplish some or all of the following goals:

1. reduce the number of classes students must attend and prepare for each day,
2. allow students variable amounts of time for learning, without lowering standards,
3. increase opportunities for some students to be accelerated,
4. reduce the number of students teachers must prepare for and interact with on a daily basis,
5. reduce the number of courses for which teachers must prepare for each day,
6. reduce the fragmentation inherent in single-period schedules,
7. provide teachers with blocks of teaching time that allow and encourage the use of active teaching strategies and greater student involvement and,
8. reduce the number of class changes (Canady & Rettig, 1995, p. 12).

Structure of the 4x4 Block Schedule

Classes in the 4x4 block schedule are taught in longer periods of approximately 90 minutes and meet for only a part of the school year, usually one semester. The 4x4 model has also been called the semester schedule or an accelerated schedule as only four courses are taught per semester. Students have the opportunity to take eight different classes in one academic year. Teachers teach three classes per semester and use one period of their day for planning. “Educators have always been concerned about having enough time to complete the course content. Because of that, they found themselves

looking for ways to change the traditional six or seven period day” (Queen, Algozzine, & Eaddy, 1997, p. 88).

The 4x4 block schedule limits the focus of students to four classes per semester so there are fewer homework assignments, quizzes and tests. This schedule allows for concentration on new topics and time for mastery. Students also have the opportunity to repeat failed classes within the same year and still graduate on time, which is an incentive to remain in school. For teachers, the 4x4 block schedule reduces the preparation to three classes of between 50 to 90 students. However, planning must now involve more than preparing the usual lecture.

Advantages of the 4x4 Block Schedule

Block classes in the 4x4 block schedule offer teachers and students many advantages. The lengthened classes increase the amount of instructional time because teachers spend less time on procedures, routines and directions. There are only three to four starts and stops as compared to the six to eight stops of the traditional schedule (Canady & Rettig, 1995).

Blocked classes provide time for extended lessons with greater continuity. Science teachers may better plan and set up for labs and classroom experiments. English teachers can guide students through the entire writing process in one period and provide time for peer editing workshops (Canady & Rettig, 1995).

The number of times students change classes is reduced and the discipline problems associated with changing classes, such as tardies and other inappropriate actions, are dramatically reduced. The hallways in schools are quieter and cleaner.

Because the students are not in the hallways, vandalism of the school property also decreases (Canady & Rettig, 1995).

The added time in the 4x4-block schedule allows for the design of differentiated lessons and lessons that maintain high interest. The use of alternate models of instruction, such as cooperative learning, inquiry, group discussion, concept development, role-playing, exploration of feeling, and conflict resolution, is possible (Gunter, Estes, & Schwab, 1990).

Students are given another chance to remain with their agemates if they fail a class in the 4x4 block schedule. Should a student fail a class during the fall semester, he or she can retake the class during the spring or fall of the following year. This second chance limits the need for summer school and helps students to maintain high self-esteem. Not only do students have chances for repeating courses or receiving help, they also have opportunities for acceleration. Students may take two foreign language classes in one school year and may be able to complete the equivalent of five or more years of a language before graduation.

Finally, students are able to accelerate the level of the academic core courses that they complete and are able to take a greater number of electives than students in a traditional schedule (Edwards, 1993). Because of this, some schools that are moving to a 4x4-block schedule have started to increase their graduation requirements.

Disadvantages of the 4x4 Block Schedule

Of course the block schedule is not a panacea for all our educational ills. Kruse and Kruse (1995) cite criticisms that the block schedule, like the traditional schedule,

adheres to the Carnegie Standard by allowing that a specific amount of time still corresponds to successful educational achievement. Innovative scheduling alone does not alter the traditional lecture/discussion method of teaching, a method that has been shown to be less effective when used by itself than a combination of methods. Instead, there is a danger that we will simply be feeding students the same diet only in more concentrated form and with less study supervision.

Diane Frost (1993) of the Asheboro, North Carolina Schools noted that among the concerns experienced in implementing such a fundamental change, the following items (each the result of block scheduling) required special waivers from the State Department of Public Education. End of year tests were to be rescheduled to accommodate the block schedule. Courses under Asheboro's block plan offered only 135 in-seat hours compared to the 150 hour requirement by the state and the standard requirement for a student athlete is to pass five courses per semester.

Among concerns expressed by teachers, Buchman, King and Ryan (1995) cited more time needed for planning, more resources needed for varying instruction, and greater preparations for a substitute.

According to Jones (1995), because of the sequential nature of their curriculum, foreign language and math teachers were particularly concerned about retention. What would be the effect on students who took first year Spanish their first semester, and didn't sign up for second year until the second semester of their sophomore year? Music teachers feared college bound students would forego band, rather than sign up for enough blocks to accommodate the necessary daily sessions. Advanced Placement teachers

worried that a first semester class would have difficulty preparing for the exams, which are administered in May.

Questions were asked by the teachers at Lakeside High in Nine Mile Falls, Washington before they adopted a block schedule. Teachers wanted to know if teaching effectiveness will change with a schedule change? Do most students have a two-hour block attention span and what will the school do with transfer students from schools with a traditional schedule? Would those students lose out on a whole semester's worth of credits? (Clauson, 1994).

Research on Block Scheduling

In a recent study (Queen & Gaskey, 1997), one county in North Carolina with three distinct high schools each having a population of 750 to 900 students, was observed. Teachers responded to a survey that rated the teachers' perceptions of scheduling effectiveness. Eighty-four percent of teachers on a 4x4 block schedule felt that they were better able to vary instructional methods as a result of the schedule. Seventy-nine percent of the teachers on a 4x4 block schedule reported an increase in the number of electives offered to students, and 84% of teachers noted that the fewer class changes resulted in a safer school environment. Administrators using a 4x4 block schedule were asked the same questions, and 94% percent of administrators felt that the schedule gave their teachers the ability to better meet the needs of individual students, and 81% of administrators saw an improvement in the school climate. Overall, 81% of teachers, 100% of administrators and 88% of parents who were surveyed felt positively

about the success of the 4x4 block-scheduling model and its implementation in their schools.

An evaluation team from Harvard studied seven schools that adopted 4x4 Block Scheduling and found that attendance in four of the seven schools improved, four of five schools showed reductions of between 25% and 75% in rates of suspension, drop out rates were reduced in six of the seven schools from 17% to 63% and academic mastery increased at a rate of 18% (Carroll, 1990).

The Asheboro, North Carolina schools, which introduced an intensive block schedule in the 1992-1993 school year, found that the increase in class time available focused more on critical thinking and problem solving and de-emphasized lecture. Students focused on fewer subjects; teachers served fewer students per day, and more elective courses were available for students (Frost, 1993).

Schoenstein (1995) found that, after undergoing the change to a block schedule, disciplinary problems at Wasson High in Colorado Springs declined significantly. He noted fewer fights and less vandalism resulting from the slower pace. In addition, teachers went from teaching 250 minutes a day to 270 minutes. The extra minutes of class time per day accumulates so that one day a month the students are released and staff can meet together.

Schoenstein noted that at Wasson, many of the concerns mentioned above had been addressed. Sequential courses such as math or foreign languages could be completed in two-year blocks. If a gap was perceived to be a problem for retention of knowledge and skills administrators at Wasson simply avoided scheduling a gap.

Advanced Placement classes were scheduled for three nine-week terms and the students earn two credits.

According to Jones (1995), teachers felt they accomplished more under block scheduling because it eliminated much of the start up and wind down time. Teachers were forced to drop the lecture format and try a variety of more effective strategies and activities.

Freeman and Maruyanna (1996) found that “four period schools show better teacher and student attitudes and perceptions on a wide range of school life dimensions including climate, working conditions, and quality of teaching and learning. They also have positive outcomes related to teaching and learning behaviors, including changed instruction and changed learning behaviors.” It is probable that any school adopting the four period day will experience some similar positive results when a schedule change is voluntarily undertaken (p.32).

Due to opportunities provided by block scheduling, individual students are able to experience a wide variety of learning strategies. The positive change in school climate is a result of the reduction in class size, the increase in the number of subjects offered, and the ability of students to study new material in an interactive, concentrated manner. The ability to flex schedules to meet the needs of an increasingly diverse population is a reality in the block-scheduling program (Queen & Gasky, 1997).

Building of Millard West High School

The plan to move to a third high school in the Millard Schools came from the District Strategic Plan that stated the need for adequate facilities to meet the mission of

the district for quality teaching and learning to take place. The recommendation of the Third High School Task Force was to move the bond issue request to the public for the funding to build a new high school. This was part of the \$35 million issue taken to the vote of the public in the spring of 1992. That vote was successful and the selection of an architectural firm and the organization of the Third High School User Groups were moved on to set a timeline for opening the facility during the start of the 1995-96 school year.

Building Philosophy

From the spring of 1992 until the spring of 1993, a great deal of information was gathered as to the optimal high school design. The best of current facilities and program research were examined and visitations were arranged to view exemplary examples of both over a year period of time. In the spring of 1993, a principal was hired to work with the community, architects and builders for two full years prior to the opening of the building to put into place the best possible programs and staff. Five major points of emphasis were developed for the direction of the building. These were:

1. Information Power (Library-Media Program)
2. Millard Education Plan (Performance Based Education)
3. Technology
4. 4x4 Block Scheduling
5. Advisement

These five points of emphasis were of extreme importance to the physical and

programmatic design of the building. They were also a powerful working tool for the Core team of 10 staff members who were chosen in the spring of 1994. These 10 individuals remained employed full time at Millard North and Millard South, but were charged to assist the principal in his work of program development, staff selection, budget preparation and design of the 4x4 block schedule.

Historical Summary of Millard West High School 1995-2000.

The 1999-2000 school year was the fifth full year of operations at Millard West High School. The first year (1995-1996) found the staff working around the construction that was on going for the entire year. Year two (1996-1997) brought with it the last of the physical plant and grounds completion. In year three (1997-1998) the staff continued to refine their internal workings and brought about more clarity and uniformity to the building philosophy. Years four and five (1998-2000) brought student growth, additional parking, portable classrooms and a 14 room addition that was completed in the winter of 2001.

Since 1993, Millard West High School sought to continue to restructure what modern schools look like today. The initial and foundational restructuring efforts all started with the reconfiguration of school time (4x4 Block Scheduling) but have since moved beyond that to other efforts in curriculum, instruction, technology, student advisement and staff empowerment. Since the opening of the building in 1995, the major building philosophy has been centered on teaching and learning. All building decisions have been made to maximize the potential for every student and staff member to succeed.

Chapter 3

Methodology

Design

The design of the study was to analyze a composite of surveys from parents, staff and students about the effectiveness of 4x4 block scheduling at Millard West High School from 1996-2000.

Sample

Three separate surveys were given to the parents, students and staff of Millard West High School from 1996-2000. An average of 1000 responses each year were returned by parents; 120 responses each year were returned by staff; and 1200 responses each year were returned by students. Parents included both males and females, and their age range was 35 years to 60 years. The staff included both males and females, ranging in age from 22 years to 62 years, with 1 year to 35 years of experience. Students were enrolled in grades 9-12, and were males and females. Based upon the number of responses from 1996-2000, the rate of return among parents was 68%; the rate of return among staff was 96%; and the rate of return among the students was 73%.

Procedures

Parents were given the questionnaire during the Fall Parent-Teacher Conferences each year. As parents were leaving the building, a questionnaire was given to them to fill out and complete. Parents were given a free Millard West cup for completing the survey as an incentive. Students were given their survey during one of the homeroom periods in April of each year. As an incentive to complete the survey, the homeroom with the

largest percentage of completed surveys received free donuts the following week. The staff completed their surveys during a staff meeting in April in each year. As an incentive for the staff, each received a Millard West Wildcat folder to use in his or her classroom for completion of the survey.

Instruments

The surveys given to parents, staff and students served dual purposes. One purpose was part of the formal five year block evaluation, but an equally important purpose was to help Millard West High School continue to improve and better serve the needs of the students, parents and staff. The data collected from these surveys as well as from other assessment tools enabled Millard West High School to set areas of focus for staff and students and to improve the learning environment.

Three separate Likert scale questionnaires were given to staff, students and parents. The questions for the questionnaire were developed by the administrative team of Millard West High School with the approval of Dr. Keith Lutz, Superintendent of Schools and Dr. John Crawford, Assistant to the Superintendent for Planning, Evaluation and Testing. Questions could be responded to by marking “Strongly Agree”, “Agree”, “Disagree”, or “Strongly Disagree”. The parent survey can be found in Appendix A, the student survey in Appendix B and the staff survey in Appendix C.

After the surveys were completed and returned, the administrative team tabulated them, and percentages were determined for each positive response to the questions. Each of the three surveys was administered for five years, and the questions did not change.

Research Questions

This study addressed the following research questions:

1. To what extent does block scheduling support a friendly and supportive environment for learning?
2. To what extent does block scheduling allow more depth of study within each department?
3. To what extent do parents, students and staff find block scheduling successful?
4. To what extent does block scheduling enable teachers to be able to work more with students to meet their varied learning needs?

Analysis

Data were analyzed by determining the positive responses given for each of the questions in all three of the surveys. Positive responses were ones that either were given a “Strongly Agree” or “Agree” response. All positive responses were compiled and tabulated for frequency and percentage to answer the research question. In order to further understand the results, means for each question were tabulated using the following scale:

Strongly Agree 4pts.

Agree 3pts.

Disagree 2pts.

Strongly Disagree 1pt.

Means for each question were figured, and an average mean for five years was determined.

<u>Survey Questionnaire</u>	<u>Research Questions</u>			
<u>Parents</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1. Does your child like attending Millard West?	x		x	
2. Do you as a parent like Millard West?			x	
3. Have the progress checks been helpful?				
4. Has communication been adequate?	x			
5. Is your child successful?			x	x
6. Does the learning pace work?	x	x		
7. Does your child receive enough assistance?	x			
<u>Students</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1. Students are actively involved	x		x	
2. Students are successful.			x	x
3. Students get help from teachers when needed.				
4. Students are prepared for tests and quizzes.				
5. Teachers use a variety of activities in class.		x		
6. Students are able to keep up the pace in class.				x
7. Students are given the right amount of homework.		x		
8. Teachers care about their students.	x	x	x	
9. Students complete their homework assignments.				
10. Students are given feedback from homework.				

11. Teachers know the abilities of their students.	x	x		
12. The quality time advisor cares about their students.			x	
13. Students enjoy their quality time.				
<u>Staff</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1. Staff can better meet the needs of the students.				
2. Staff uses a variety of instructional strategies.		x		
3. Students are learning more content depth.		x		
4. Staff collaborates with other teachers				
5. Students enjoy Millard West			x	
6. Instructional strategies are varied.		x		
7. Students are given regular feedback			x	
8. Higher levels of thinking are used.		x		
9. Multiple disciplines work together.		x		
10. Students enjoy their classes.	x		x	
11. Staff communicates with parents.	x			
12. Staff call parents when grades are below avg.				
13. Staff enjoys teaching at Millard West.	x		x	
14. Staff improves on their teaching methods.				x
15. Staff have an influence on decisions at school.				

Chapter 4 will include responses from each of the three questionnaires. The data will be compiled and tabulated for frequency and percentage to answer the research questions.

Chapter 4

Presentation of Data

The design of the study was to analyze a composite of surveys from parents, staff and students about the effectiveness of 4x4 block scheduling at Millard West High School from 1996-2000. For the purpose of this study, a favorable response to individual items were responses returned in the categories of Strongly Agree, or Agree. All positive responses were compiled and tabulated for frequency and percentage to answer the research questions.

The research questions presented were:

1. To what extent does block scheduling support a friendly and supportive environment for learning?
2. To what extent does block scheduling allow more depth of study within each department?
3. To what extent do parents, students and staff find block scheduling successful?
4. To what extent does block scheduling enable teachers to be able to work more with students to meet their varied learning needs?

This chapter will present data obtained from three separate surveys that were given to the parents, students and staff of Millard West High School from 1996-2000. An average of 1000 responses each year were returned by parents; 120 responses each year were returned by staff; and 1200 responses each year were returned by students. Parents included both males and females, and their age range was 35 years to 60 years.

The staff included both males and females, ranging in age from 22 years to 62 years, with 1 year to 35 years of experience. Students were enrolled in grades 9-12, and were males and females. Based upon the number of responses from 1996-2000, the rate of return among parents was 68%; the rate of return among staff was 96%; and the rate of return among the students was 73%.

<u>Total Responses</u>	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
<u>Parent Survey</u>	1100	1054	1015	985	902
<u>Student Survey</u>	1245	1200	1143	1158	1208
<u>Staff Survey</u>	127	122	118	122	121

Research Question One

To what extent does block scheduling support a friendly and supportive environment for learning?

Parent Questionnaire

Question 1 Does your daughter and/or son like attending Millard West?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 82%	SA 81%	SA 86%	SA 88%	SA 89%
	A 12%	A 10%	A 8%	A 7%	A 5%
Positive Responses	94%	91%	94%	95%	94%
Mean	3.67	3.68	3.83	3.87	3.86
Average of Means	3.78				

Question 4 Has communication about your child's progress been adequate?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 73%	SA 71%	SA 79%	SA 74%	SA 74%
	A 22%	A 11%	A 12%	A 14%	A 15%
Positive Responses	95%	82%	91%	88%	89%
Mean	3.66	3.50	3.66	3.56	3.60
Average of Means	3.60				

Question 6 Is the learning pace of the block working for your child?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 78%	SA 77%	SA 78%	SA 72%	SA 74%
	A 10%	A 12%	A 13%	A 16%	A 16%
Positive Responses	88%	89%	91%	88%	90%
Mean	3.60	3.61	3.67	3.54	3.59
Average of Means	3.60				

Question 7 Is your student receiving enough assistance from his/her teachers?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 58%	SA 55%	SA 67%	SA 63%	SA 67%
	A 28%	A 30%	A 24%	A 25%	A 20%
Positive Responses	86%	85%	91%	88%	87%
Mean	3.40	3.35	3.57	3.47	3.49
Average of Means	3.46				

Student QuestionnaireQuestion 1 I am actively involved in classroom projects and activities this year.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 50%	SA 52%	SA 55%	SA 54%	SA 54%
	A 25%	A 27%	A 25%	A 35%	A 33%
Positive Responses	75%	79%	80%	89%	87%
Mean	3.01	3.18	3.20	3.25	3.22
Average of Means	3.17				

Question 8 I believe that my teachers care about me and about my learning.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 54%	SA 54%	SA 59%	SA 57%	SA 52%
	A 22%	A 20%	A 18%	A 28%	A 32%
Positive Responses	76%	74%	77%	85%	84%
Mean	3.21	3.20	3.28	3.37	3.30
Average of Means	3.28				

Question 11 My teachers know my strengths and weaknesses as a learner in their class.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 44%	SA 41%	SA 40%	SA 55%	SA 60%
	A 24%	A 23%	A 25%	A 25%	A 22%
Positive Responses	68%	64%	65%	80%	82%
Mean	3.0	2.89	2.9	3.27	3.34
Average of Means	3.1				

Staff QuestionnaireQuestion 10 Students enjoy my classes.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 85%	SA 90%	SA 89%	SA 94%	SA 93%
	A 5%	A 9%	A 11%	A 4%	A 6%
Positive Responses	90%	99%	100%	98%	99%
Mean	3.72	3.89	3.89	3.92	3.92
Average of Means	3.87				

Question 11 I am comfortable communicating with parents.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 62%	SA 64%	SA 67%	SA 68%	SA 65%
	A 18%	A 25%	A 25%	A 22%	A 25%
Positive Responses	80%	89%	92%	90%	90%
Mean	3.62	3.70	3.75	3.72	3.72
Average of Means	3.70				

Question 13 I like teaching at Millard West.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 80%	SA 82%	SA 80%	SA 85%	SA 87%
	A 10%	A 12%	A 13%	A 4%	A 5%
Positive Responses	90%	94%	93%	89%	92%
Mean	3.50	3.60	3.58	3.48	3.56
Average of Means	3.52				

Research Question 2

To what extent does block scheduling allow more depth of study within each department?

Parent Questionnaire

Question 6 Is the learning pace of the block working for your child?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 61%	SA 62%	SA 69%	SA 68%	SA 66%
	A 27%	A 27%	A 22%	A 20%	A 22%
Positive Responses	88%	89%	91%	88%	88%
Mean	3.47	3.48	3.60	3.52	3.52
Average of Means	3.52				

Student Questionnaire

Question 5 My teachers use a variety of activities in class.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 43%	SA 45%	SA 46%	SA 42%	SA 40%
	A 30%	A 24%	A 28%	A 42%	A 42%
Positive Responses	73%	69%	74%	84%	82%
Mean	3.22	3.19	3.24	3.42	3.40
Average of Means	3.29				

Question 7 I am given the right amount of homework to learn the concepts and materials for class.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 58%	SA 60%	SA 60%	SA 72%	SA 70%
	A 18%	A 20%	A 19%	A 15%	A 14%
Positive Responses	76%	80%	79%	87%	84%
Mean	3.20	3.35	3.32	3.56	3.50
Average of Means	3.39				

Question 8 I believe that my teachers care about me and about my learning.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 42%	SA 44%	SA 40%	SA 48%	SA 54%
	A 34%	A 30%	A 37%	A 37%	A 36%
Positive Responses	76%	74%	77%	85%	90%
Mean	3.16	3.14	3.18	3.72	3.80
Average of Means	3.40				

Question 11 My teachers know my strengths and weaknesses as a learner in their classes.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 32%	SA 34%	SA 30%	SA 48%	SA 54%
	A 28%	A 30%	A 35%	A 32%	A 31%
Positive Responses	60%	64%	65%	80%	85%
Mean	2.82	2.90	2.97	3.28	3.35
Average of Means	3.06				

Staff Questionnaire

Question 2 I use more variety of instructional strategies which allow students to process information.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 90%	SA 91%	SA 90%	SA 92%	SA 92%
	A 4%	A 7%	A 6%	A 4%	A 4%
Positive Responses	94%	98%	96%	96%	96%
Mean	3.83	3.89	3.86	3.86	3.86
Average of Means	3.86				

Question 3 My students are learning more content depth.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 64%	SA 73%	SA 70%	SA 76%	SA 78%
	A 12%	A 13%	A 10%	A 11%	A 12%
Positive Responses	76%	86%	80%	87%	90%
Mean	3.25	3.55	3.45	3.59	3.66
Average of Means	3.50				

Question 6 I vary instructional strategies at least three times during the class period.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 94%	SA 92%	SA 90%	SA 91%	SA 90%
	A 6%	A 5%	A 5%	A 5%	A 7%
Positive Responses	100%	97%	95%	96%	97%
Mean	3.94	3.91	3.89	3.90	3.91
Average of Means	3.92				

Question 8 I encourage students in higher levels of thinking.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 62%	SA 60%	SA 66%	SA 67%	SA 66%
	A 28%	A 29%	A 33%	A 30%	A 31%
Positive Responses	90%	89%	99%	97%	97%
Mean	3.52	3.45	3.65	3.65	3.63
Average of Means	3.58				

Question 9 I engage in discussions with other teachers in multiple disciplines about instructional strategies.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 39%	SA 45%	SA 41%	SA 62%	SA 66%
	A 20%	A 20%	A 16%	A 17%	A 12%
Positive Responses	59%	65%	57%	79%	88%
Mean	2.81	2.50	2.65	3.35	3.42
Average of Means	2.98				

Research Question 3

To what extent do parents, students and staff find block scheduling successful?

Parent Questionnaire

Question 1 Does your child like attending Millard West?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 73%	SA 71%	SA 74%	SA 74%	SA 75%
	A 22%	A 11%	A 17%	A 14%	A 15%
Positive Responses	95%	82%	91%	88%	90%
Mean	3.68	3.45	3.64	3.57	3.61
Average of Means	3.60				

Question 2 Do you as a parent like Millard West?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 65%	SA 69%	SA 67%	SA 70%	SA 71%
	A 23%	A 22%	A 22%	A 18%	A 17%
Positive Responses	88%	91%	89%	88%	88%
Mean	3.51	3.59	3.52	3.56	3.55
Average of Means	3.56				

Question 5 Is your child successful?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 60%	SA 62%	SA 65%	SA 60%	SA 58%
	A 29%	A 27%	A 18%	A 29%	A 34%
Positive Responses	89%	89%	93%	89%	92%
Mean	3.48	3.48	3.54	3.48	3.50
Average of Means	3.50				

Student QuestionnaireQuestion 1 Students are actively involved.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 76%	SA 70%	SA 70%	SA 71%	SA 74%
	A 15%	A 16%	A 11%	A 13%	A 14%
Positive Responses	91%	86%	81%	84%	88%
Mean	3.65	3.55	3.42	3.49	3.60
Average of Means	3.54				

Question 2 Students are successful.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 51%	SA 40%	SA 50%	SA 60%	SA 68%
	A 25%	A 34%	A 27%	A 25%	A 22%
Positive Responses	76%	74%	77%	85%	90%
Mean	3.33	3.10	3.19	3.42	3.55
Average of Means	3.32				

Question 8 Teachers care about their students.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 50%	SA 48%	SA 45%	SA 58%	SA 60%
	A 22%	A 25%	A 35%	A 27%	A 24
Positive Responses	72%	73%	75%	85%	84%
Mean	3.10	3.12	3.30	3.38	3.41
Average of Means	3.26				

Question 12 The quality time advisor cares about their students.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 74%	SA 72%	SA 78%	SA 80%	SA 80%
	A 10%	A 12%	A 12%	A 8%	A 9%
Positive Responses	84%	84%	90%	88%	89%
Mean	3.49	3.49	3.55	3.60	3.61
Average of Means	3.57				

Staff QuestionnaireQuestion 5 Students enjoy Millard West.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 79%	SA 80%	SA 81%	SA 80%	SA 82%
	A 10%	A 10%	A 8%	A 9%	A 7%
Positive Responses	89%	90%	89%	89%	89%
Mean	3.62	3.67	3.66	3.63	3.67
Average of Means	3.65				

Question 10 Students enjoy their classes.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 85%	SA 90%	SA 89%	SA 94%	SA 93%
	A 5%	A 9%	A 11%	A 4%	A 6%
Positive Responses	90%	99%	100%	98%	99%
Mean	3.72	3.89	3.89	3.92	3.92
Average of Means	3.87				

Question 13 Staff enjoys teaching at Millard West.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 80%	SA 82%	SA 80%	SA 85%	SA 87%
	A 10%	A 12%	A 13%	A 4%	A 5%
Positive Responses	90%	94%	93%	89%	92%
Mean	3.50	3.60	3.58	3.48	3.56
Average of Means	3.52				

Research Question 4

To what extent does block scheduling enable teachers to be able to work more with students to meet their varied learning needs?

Parent Questionnaire

Question 5 Is your child successful in the block?

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 60%	SA 62%	SA 65%	SA 60%	SA 58%
	A 29%	A 27%	A 18%	A 29%	A 34%
Positive Responses	89%	89%	93%	89%	92%
Mean	3.48	3.48	3.54	3.48	3.50
Average of Means	3.50				

Student Questionnaire

Question 2 I am successful at Millard West.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 60%	SA 60%	SA 58%	SA 50%	SA 52%
	A 27%	A 31%	A 45%	A 44%	A 42%
Positive Responses	87%	91%	93%	94%	94%
Mean	3.41	3.46	3.48	3.49	3.49
Average of Means	3.47				

Question 6 I am able to keep up with the pace of the block

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 60%	SA 62%	SA 65%	SA 60%	SA 58%
	A 29%	A 27%	A 18%	A 29%	A 34%
Positive Responses	89%	89%	93%	89%	92%
Mean	3.48	3.48	3.54	3.48	3.50
Average of Means	3.50				

Staff Questionnaire**Question 14** I have improved my teaching this year.

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00</u>
	SA 80%	SA 84%	SA 84%	SA 80%	SA 81%
	A 12%	A 13%	A 13%	A 15%	A 14%
Positive Responses	92%	97%	97%	95%	95%
Mean	3.70	3.76	3.76	3.74	3.74
Average of Means	3.74				

Chapter 5 will include conclusions and recommendations of the survey with each of the four research questions addressed.

Chapter 5

Conclusion

The purpose of this study was to analyze a composite of surveys from parents, staff and students about the effectiveness of 4x4 block scheduling at Millard West High School from 1996-2000. To address this issue, during the research study, four specific questions were addressed:

1. To what extent does block scheduling support a friendly and supportive environment for learning?
2. To what extent does block scheduling allow more depth of study within each department?
3. To what extent do parents, students and staff find block scheduling successful?
4. To what extent does block scheduling enable teachers to be able to work more with students to meet their varied learning needs?

Three separate surveys were utilized to assess perceptions of parents, students and staff. An average of 1000 responses each year were returned by parents; 120 responses each year were returned by staff; and 1200 responses each year were returned by students. Parents included both males and females, and their age range was 35 years to 60 years. The staff included both males and females, ranging in age from 22 years to 62 years, with 1 year to 35 years of experience. Students were enrolled in grades 9-12, and were males and females. Once the tabulation and percentages were completed, a mean score for each year was configured as well as an overall average of means for each question was determined. The mean and average of means helped determine the significance of the questions and how they relate to each

of the four research questions.

Research Question Results

As a result of the data analyzed, conclusions can be drawn from the study concerning perceptions of respondents and their satisfaction with the effectiveness of 4x4 block scheduling at Millard West High School.

Research Question One

To what extent does block scheduling support a friendly and supportive environment for learning?

Based upon the results from the parent survey, the parents felt that their son and/or daughter liked attending Millard West High School. From 1998 – 2000, the average positive responses from question #1 was 94.5%. The average of means over the last five years was a 3.78. This average of means and the positive responses were the highest from all of the parent questions used in the survey. Parents felt good about Millard West and what their children were being exposed to. On the other hand, parents felt that their son and/or daughter still need more assistance from their teachers. Based upon the four questions used in the survey, question #7, “Is your student receiving enough assistance,” was the lowest in mean, average of means and positive response percentage over the past five years. Overall, the four questions used in the survey were well over the 3.5 mean average which would support the fact that parents did feel that block scheduling supported a friendly and supportive environment for learning.

Based upon the results from the student survey, students gave a lower percentage for positive responses, mean average of means as compared to parents and staff. Students were concerned that their teachers did not know their strengths and weaknesses as a learner in

their class. In 1995/96 students only gave a 68% approval rating, but by 1999/00 the approval rating was a 82%. The increase over the latter two years may be due to increase in standardized testing and essential learner outcomes which were developed and implemented in the fall of 1998. The increase in testing forced teachers to analyze each student in their class and how they learn the best. New teaching methods were used, such as an increased emphasis on writing as shown through the Six Trait Writing process.

Based upon the results from the staff survey, staff felt that students enjoyed their classes. Over the five year span, the positive responses averaged 98%, and the mean average was a 3.87. Overall, staff enjoyed teaching at Millard West and the results from the survey support that fact.

A total of ten questions were used to analyze research question #1. From the results, the average of means was a 3.51 which shows that block scheduling supports a friendly and supportive environment for learning.

Research Question 2

To what extent does block scheduling allow more depth of study within each department?

Based upon the results of the parent survey, parents felt that the learning pace of the block worked for their child. The positive responses averaged 89%, and the mean average was 3.52.

Based upon the results of the student survey, students felt the their teachers cared about them and their learning. The average of means was a 3.4 and the total positive responses gained 14% from 1995/96 to 1999/00. In 1995/96, students felt that the staff did not

know their strengths and weaknesses as a learner. The positive responses were only 60% and the mean was a 2.82. By 1999/00, the positive responses were 85% and the mean at a 3.35. This may be due to standardized testing and the essential learner outcomes put in place in the fall of 1998. Overall, the average of means score for all of the student responses was under 3.5. This suggests that students do not support the fact that block scheduling allows more in depth studying.

Based upon the results of the staff survey, staff felt that they vary their instructional strategies at least three times during the class period. The positive responses averaged 98% and the average of means was a 3.92. The one area that is a concern is the ability of staff to engage in discussions with other teachers in multiple disciplines about instructional strategies. In 1995/96, staff only gave a 59% approval rating, but by 1999/00 the approval was 88%. A change in the building structure, staff development and standardized testing in 1998 may have been significant in the increase in positive responses.

Overall, ten questions from the surveys were used to support research question #2. The average of means for all ten questions was 3.5 which supports the second research question that block scheduling allows more depth of study within each department.

Research Question 3

To what extent do parents, students and staff find block scheduling successful?

Based upon the parent survey, parents felt that block scheduling was successful.

Over the last three years, the percentage of positive responses was greater than any other question used from the parent survey. Perhaps related to increased testing, essential

learner outcomes and increase in graduation requirements, parents felt that their child was successful in the block. The survey supports this finding.

Based upon the student survey, students felt that they were successful in the block. One area of concern is the fact that students did not see all of their teachers caring about their success. From 1995/96 – 1997/98, the positive responses averaged 73%. The last two years the average went to 84%. Again, this maybe due to increase of testing, essential learner outcomes and increase in graduation requirements.

Based upon the staff survey, staff felt that block scheduling was successful. Over the last three years, the average positive response was 93%. There was also an increase in how staff felt that students enjoyed their class.

Overall, 10 questions were used to support research question #3. The overall average of means for all of the questions was 3.60, which would support the fact that parents, students and staff found block scheduling successful.

Research Question 4

To what extent does block scheduling enable teachers to be able to work more with students to meet their varied learning needs?

Based upon the parent survey, only survey question #5 was used. The question asked parents if they felt that their son and/or daughter was successful in the block. The positive response average for the five years was 91%. The percentage of positive responses increased over the last three years of the survey. Again, this may be related to an increase in testing, essential learner outcomes and graduation requirements.

Based upon the student survey, students felt that they were successful and able to

keep up with the pace of the block. Both questions used from the survey averaged 91% for positive responses. Again, those percentages increased over the last three years of the survey.

Based upon the staff survey, only survey question #14 was used. The question asked staff if they have improved their teaching over the year. The positive responses averaged 95% and the mean average increased over the last three years of the survey.

Overall four questions were used to support research question 4. The overall average of means for those four questions was 3.6 which would support the fact that staff were able to work more with students to meet their varied learning needs.

Conclusions

The building of Millard West High School and the implementation of the 4x4 block schedule was a tremendous task which involved parents, students staff and the community. With the opening of a new high school, excitement is high and the anticipation to see a new building with all new equipment is a once-in-a-life time opportunity for everyone involved. The purpose of the surveys was to see if the 4x4 block schedule was an effective change for students, staff and parents. Based upon the survey results, block scheduling was a positive change and was effective for students, staff and parents. Positive responses, mean and average of means were lower the first two years then the last three years of the survey. Two reasons for this may have been that teachers need at least two years teaching under a block schedule to provide effective instruction and that standardized testing, essential learner outcomes and a increase in graduation requirements made teachers go back and see how they were teaching and what could they do to become more effective. Parents, students

and staff seemed to detect a stronger focus over the last three years of the survey to provide quality instruction for all students. The key to success is to provide new opportunities for everyone and not be afraid to change and adjust from year to year. Changes were made over the last three years, but the comments made about the block schedule were always positive and supportive.

Recommendations

Based upon the findings of the study, the following recommendations appear to be justified. Block scheduling is not enough by itself. Change is needed within the building or district for the block to be effective. Every year since 1998, Millard West made changes to their internal structure and the district implemented Essential Learner Outcomes, Six Trait Writing and an increase in the graduation requirements. Because of those changes, teachers also needed to make changes and adjust instruction.

Since teachers in the block have students for only 18 weeks, teachers need to identify the learning needs of students much earlier so they can be effective learners. Information about each student can be developed at the 8th grade level as well as each semester that the student is in high school. This information can be passed on to each teacher throughout the year.

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Appendix A
Parent Questionnaire

QUESTION	1996	1997	1998	1999	2000
Does your daughter and/or son like attending Millard West?					
Do you as a parent like Millard West?					
Have the progress checks been helpful?					
Has communication about your child's progress been adequate?					
Is your child successful in the block?					
Is the learning pace of the block working for your child?					
Is your student receiving enough assistance from his/her teachers?					

Appendix B
Student Questionnaire

QUESTION	1996	1997	1998	1999	2000
I am actively involved in classroom projects and activities this year.					
I am successful at Millard West.					
I am able to get help from my teachers when I need it.					
I have felt prepared for tests and quizzes.					
My teachers use a variety of activities in class.					
I am able to keep up with the pace of the block.					
I am given the right amount of homework to learn the concepts and materials for class.					
I believe that my teachers care about me and about my learning.					
I complete my homework assignments.					
I am given feedback on homework and quizzes in time to use the information to study for tests and final projects.					
My teachers know my strengths and weaknesses as a learner in their classes.					
My quality time advisor cares about me and about my learning.					
I like my quality time group.					

Appendix C
Staff Questionnaire

QUESTION	1996	1997	1998	1999	2000
I am better able to meet individual student academic needs.					
I use more variety of instructional strategies which allow students to process information.					
My students are learning more content depth.					
I collaborate with other teachers in planning and instruction.					
Students are enjoying school at Millard West.					
I vary instructional strategies at least three times during class.					
I give individual students feedback on a regular basis.					
I encourage students in higher levels of thinking.					
I engage in discussions with other teachers in multiple disciplines about instructional strategies.					
Students enjoy my classes.					
I am comfortable communicating with parents.					
I always call parents of students receiving 4's and 5's.					
I like teaching at Millard West.					
I have improved my teaching this year.					
I believe I have influence on what happens at Millard West.					