

TEACHERS' PERCEPTIONS OF
THE BLOCK SCHEDULE

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ABSTRACT

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This study was developed to investigate Menomonie High School teachers' perceptions of the block schedule regarding modifications to departmental courses and services, advantages and disadvantages of the block schedule, and suggestions for modifications to the current block schedule. A researcher-developed questionnaire was sent via school mailbox to 66 faculty, with 28 returning the questionnaire and participating in the study.

The findings indicate that modifications made to departmental courses and services included: the compacting of curriculum, the addition of terms to some courses, the inclusion of additional grade levels in some courses, and the creation of new courses.

The advantages that were indicated included: longer class time allowed for more in-depth discovery type learning, varied teaching practices and activities, integration of content areas such as U.S. history/U.S. literature and speech/composition, fewer teacher preparations, longer preparation time, fewer courses for students to manage, less stress for teachers and students, improved relationships between students and teachers, and the creation of new elective course offerings.

The disadvantages indicated included: less developmental time for learning, an increase in class sizes, some curriculum lost due to compacting, some departments could not service all student requests, some departments dropped electives to accommodate more sections of required courses, no safety net for failing students, difficulty of placing transfer students in the schedule, class balances unequally distributed, some students had difficulty maintaining attention for the longer period of time, retention loss during gaps between related courses, curriculum watered down due to necessary review time, difficulties for substitute teachers, no study halls for remediation, and student absences are more detrimental.

Suggestions for modifying the current block schedule included: going to a trimester schedule with twelve or thirteen week grading terms and five sixty to sixty-five minute periods, increasing staff, modifying the block with skinnies, implementing an A/B block schedule, adding electives in all areas, keeping students with the same teacher for all terms of a course, building in more one on one time for students who are failing, and having three terms for lower level courses.

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CHAPTER 1

Introduction

School restructuring has emerged in the form of block scheduling for many schools across the nation. School personnel have various reasons for considering block scheduling: to reduce stress, to create larger blocks of time for instruction, to allow students to enroll in additional classes each year, to reduce failure rate, and to allow students to prepare for fewer classes at a time (Hackman, 1995).

As the mania for school reform travels the country, block scheduling has emerged as an innovative alternative to the traditional seven or eight period day. Prisoners of Time, the report of the 1994 National Education Commission of Time and Learning, recommended flexibility in time scheduling to better serve student's educational needs. Many schools have shifted from the traditional 45-50 minute period to two, three, or four period time blocks of 80-minutes or longer. Many types of block schedules exist, but they all share the element of flexibility in the use of time. The 4 X 4 model has two semesters of four classes, each 90-minutes in length. Modifications can be made, such as an additional shorter period of time for remediation. In the A/B schedule, students take periods 1 through 4 on A days and periods 5-8 on B days. Because of alternating days, these courses would last an entire school year. Again, modifications can be made to this schedule. Another option would be the micro course schedule, in which longer blocks of time are made available for certain classes. These usually last for several weeks or months and are paired with courses that follow a traditional yearlong schedule. These longer alternative schedules are based on the premise that longer blocks of time will allow greater use of methodology, enable the teacher to become a facilitator instead of a

lecturer, and create a less stressful classroom environment. The result would be increased student achievement (Carroll, 1994;Sizer, 1992; Canady & Rettig, 1995). Perhaps the most important work is the book by Canady and Rettig entitled Block Scheduling: A Catalyst for Change in High Schools (1995). Canady and Rettig discuss the history of block scheduling, show models and implementation procedures, and explain advantages. Also, Hackman's (1995) article "Ten Guidelines for Implementing Block Schedules" is useful when considering time restructuring. Other valuable research includes Reis and Renzulli (1992) about curriculum compacting, Carroll (1990) and his Copernican plan, and Grinsel (1989) about flexible scheduling.

No matter what the reasons or formats, longer class periods are the main component of block scheduling. Why does this seem to be replacing the traditional seven or eight period schedule? "The structure of the traditional school system itself has inhibited school improvement efforts" (Edwards, 1995, p. 11). John O'Neil, senior editor of **Educational Leadership**, describes it this way:

Students race from one 50-minute class to another, attending as many as seven different teachers in a single day. Teachers rush to get through the period's objectives before the bell rings, often running out of time just as the class gets rolling.

With 125 or more students to teach, teachers struggle to learn about their pupil's strengths and weaknesses and to provide individual attention.

Roger Schoenstein, who teaches English and Latin, is elated with the change.

'It's a whole lot easier managing 75 kids', he says, adding that he gets to know each student better. The longer classes also provide enough time for Schoenstein to use various instructional strategies. In 90 minutes he can present information, organize

students in pairs or cooperative learning groups, have a lively discussion, and get them to do some writing. In the past, he often found himself presenting until the bell rang, then telling his students: ‘Remember all this stuff—tomorrow we’ll practice it.’ (1995, p. 11)

A longer block of time does not produce a positive effect upon a school environment and learning in and of itself. Positive results are being produced by how teachers are designing instruction in large blocks of time.

According to Huff (1995): “The length of the class period and the credit received for minutes of attendance have little correlation with what a student learns during an academic grading period.” (p. 19) Huff continues by saying that block scheduling is worth consideration because “it is ideally designed to accommodate several modes of instruction within a class. The more varied the instruction, the greater probability that all students will learn.” (p. 20)

Block scheduling seems to allow more opportunity for the building of positive relationships that is necessary for a successful learning environment.

Statement of the Problem

The purpose of this study was to investigate teachers’ perceptions of the block schedule regarding modifications to departmental courses and services, advantages and disadvantages of the block schedule, and suggestions for modifications to the current block schedule at Menomonie High School during the fall of the 1999-2000 school year.

A questionnaire was used to collect information. Since this is Menomonie High School’s fourth year of block scheduling, the teachers have some experience to shape their perceptions of the advantages and disadvantages of the block schedule.

Research Questions

This study will examine the teacher perceptions of these questions:

1. How many years of teaching experience do you have?
2. How many years of teaching within a block schedule?
3. Has your department modified any courses or services because of the block schedule? Please describe.
4. What are the advantages and disadvantages of the block schedule within your department as you see them?
5. If you could modify the current block schedule at MHS, what changes would you make? Please explain why you would make these changes.

Definition of terms

For the purpose of this study, the following terms have been defined in this manner:

Block schedule – A reorganization of time that provides for longer periods of instruction when compared with traditional schedules.

Carnegie Standard – Traditional way of measuring learning. Seat time translates into completion of incompleteness of course.

Copernican plan – A schedule having one or two classes each day for an extended time of two to four hours.

Four period day – A block schedule that divides the instructional day into four class periods.

Intensive Time Scheduling (ITS) – Manipulation of time to promote learning.

Skinnies – Shorter classes meeting every day or alternating with other classes.

Assumptions and Limitations

All school systems should have a continual process of evaluation and adjustment.

This is especially true of schools in the process of restructure.

Teacher subjects were limited to Menomonie High School faculty employed during the 1999-2000 school year. Resistance to change is a common by-product of restructuring. This may cause overly negative reactions to this study. Some teachers at Menomonie High School have retired or have taken employment elsewhere. This may limit some results. Since participation in this study was voluntary, some questionnaires may not have been returned. Some questions may have been misunderstood or misinterpreted.

CHAPTER 2

Literature Review

More research exists on implementation and purpose of block scheduling than on teacher reactions and perceptions to it. According to O'Neil, "the effectiveness of alternative schedules, however, depends on teachers being able to use different class formats" (1995, p. 11). Now that many schools have been on the block schedule for four years or more, what are the teachers' reactions and perceptions to it? How have they designed their instruction in the block? Do the longer blocks of time allow schools to meet needs and achieve purposes as they were intended? What concerns do teachers have as a result of the longer blocks of time?

Salvatterra and Adams (1996) collected data from four high schools in central and northeastern Pennsylvania. Their surveys investigated how Intensive Time Scheduling (ITS) affected five areas of teacher instructional behavior: the incorporation of new instructional activities in class, use of cooperative learning strategies, use of library materials and service, changes in student assessment procedures, and changes in teacher preparation time. The results indicated that the majority of teachers in all four schools stated that ITS enhanced their ability to develop and include new activities in the classroom. Some teachers voiced concerns that students could not maintain attention for the longer time, and discipline problems and waning motivation inhibited the positive effects of new activities.

The teachers in all four schools reported that they were using more cooperative learning strategies. The authors warned that these activities should be evaluated for promoting learning and should not be merely time fillers (Salvatterra & Adams, 1996).

Teachers perceived that ITS would open the door to new types of assessments, but some teachers felt limited to “cover the book” and were giving tests more frequently. Others reported investigating portfolio types of assessments. This area needed more study (Salvatterra & Adams, 1996).

The teachers perceived an increased use of the library materials and services. The librarians concurred with this and reported noticeable increases in the use of the library by math and science classes, particularly for investigation of topics by individual students. More requests for materials not available in the library cause an increased workload in obtaining materials through interlibrary loan (Salvatterra & Adams, 1996).

The teachers experienced a need for more preparation time especially in the implementation of ITS. Some teachers stated that they could not be absent even when they were sick. Others felt that the prep time was no greater, just different. Extra preparation time for longer periods was offset by having fewer classes to prepare for.

The majority of teachers in all four schools favored ITS to the traditional schedule and cited these reasons: ability to do group work and projects, opportunities to cover material more comprehensively, time to complete an entire lesson in a single period, and fewer interruptions resulting in more time on task (Salvatterra & Adams, 1996).

Liu and Dye (1998) conducted a survey with teachers as part of a study of a small rural school district in southeast Alabama. This school had implemented an eight block semester and students enrolled in four classes each term. The teachers were very optimistic about the impact of the new schedule upon student learning, but a third of the teachers were uncertain whether they had fewer or more behavior problems.

The teachers were positive about the opportunity within the block schedule to improve instruction practices:

Among the participating teachers (77%), 57% used more peer tutoring; 62% used more hands-on activities; 63% increased the use of small group activity; and 72% **varied their teaching strategies. Forty-eight percent of teachers reported that they tested students more. In responding to the effect of block scheduling upon their professional development, 73.3% of the teachers reported favoring the longer period of time available for preparing lesson plans, and 51% expected more opportunities to work for interdisciplinary teaching. The responding teachers also expressed the need for professional training—46% for training in varying teaching strategies and 41% for maintaining student** interest during the longer class periods. (Lie & Dye 1998 p.2)

The teachers cited positive traits of block scheduling as:

1) improved teaching, 2) opportunity for contact with more students over the course of the year, 3) opportunity for a new beginning each year, 4) the need to develop fewer lesson plans during each term, 5) increased student time on task, 6) opportunity for students to focus more on their subjects, 7) increased learning from students, and 8) a reduction in student traffic in the hallways. (Liu& Dye, 1998, p. 2)

The teachers also expressed concerns. Some wondered if changing from lecture to more active student involvement and collaboration might be viewed in negative ways by parents and administrators. Teachers might have to deal with discipline problems for a longer time. Some teachers who changed from one course to another between terms

might have more course preparation. Teachers were also concerned with long-term retention of skills and concepts and elapsed time between related courses. Many cited that maintaining student interest for longer time periods could be a problem. Absences might mean more makeup work. Many felt that more elective courses needed to be available to the students. Finally, many teachers expressed the need to assess the effect of the block schedule upon student learning (Liu & Dye, 1998).

Dow and George (1998) reviewed the varied uses of the block schedule by Florida high schools. Sixty-three percent of their respondents reported reduced discipline referrals. Sixty-five percent reported increased honor roll numbers. Fifty-five percent reported increased enrollment in electives. Fifty-percent reported increased grade point average and 60% reported more positive relationships between teachers and students. Sixty-nine percent of teachers felt revitalized because of the block schedule and 98% said the new schedule encouraged more creative and innovative teaching methods (Dow & George, 1998).

Concerns about block scheduling were the retention of knowledge from one semester or year to the next. Some respondents noted curricular pacing and using instructional strategies appropriate to the longer period as concerns. Instructors of advanced placement and foreign language courses were especially concerned about this. A greater resistance to the new schedule mainly came from music, math, and foreign language teachers (Dow & George, 1998).

Queen, Algozzine, and Eaddy (1996) provided a look at the success of the 4X4 block in social studies in North Carolina. Positives from their studies included flexibility in classroom instruction, longer planning periods for teachers, greater course offerings for

students, one or two class preparations for teachers, and more time each day for in-depth study. Negatives included loss of retention from one level of a course to the next, too much independent study needed outside of class, students transferring from schools not using the block schedule, a limited number of new electives being offered, and continued use of the lecture method in the classroom (Queen, Algozzine, & Eaddy, 1996).

These researchers used observations, conferences, and surveys over a three-year period to prioritize the most important teaching skills. The most important was the ability to develop a pacing guide for the course over a nine week period and also for semester, weekly, and daily planning. Next was the ability to use several instructional strategies effectively. Then came the skill to design and maintain an environment that allows for great flexibility and creativity. Next was the desire and skill to be an effective classroom manager. The last was the freedom to share the ownership of teaching and learning with the students. (Queen, Algozzine, & Eaddy, 1996).

Kramer (1996) reviewed block schedule studies that focused on mathematics. Many studies cited Algebra as a concern because it is the foundation for higher-level math courses. Some felt that eighteen weeks even with longer periods of class time was too fast and students were not as prepared as they needed to be. This led to modifications in the delivery and arrangement of math instruction such as: the creation of a two part algebra class for lower level math students, replacing the normal first-year—second-year algebra sequence with three shorter algebra courses, modifying geometry and first year algebra courses to eliminate topics taught in second year algebra, the creation of two separate classes to replace a combined second year algebra and trigonometry class, and

the addition of new courses such as, statistics for students who complete the regular sequence (Kramer, 1996).

Howard (1997) studied block scheduling with regards to advanced placement mathematics in Texas magnet schools. She reports that more students are successfully passing advanced placement tests but with a decrease from 73% to 66% on the AP calculus test. Howard suggests that the block schedule might be a popular fad without the adequate research of the effects of the block schedule upon student achievement. She also suggests that the reasons for block scheduling are more affective and popular such as convenience (Howard, 1997).

Wronkovich (1998) calls block scheduling the educational fad of the nineties. He says that schools make the change first and then try to assess what outcomes are observed from making the change. This is the reverse of what should be happening. He points out that opponents of block scheduling contend that schools implementing block scheduling ignore the principles of distributive learning. Spaced practices over several lessons or study periods are superior to equal amounts of time spent in massed practice. Wronkovich points out that improved attendance rates and lower drop out rates are not good trades for negatively impacting learning in important academic subjects. He promotes flexibility to create hybrid schedules to accommodate areas such as music and languages so the best of both worlds can be found. Only then can block scheduling be real reform (Wronkovich, 1997).

Cree (1997) argues that music and block scheduling are compatible. He promotes the use of a modified block which was the result of his school's former eight period day and block scheduling. It is not a perfect solution, but his school in Pennsylvania has

maintained offerings of fine arts and the number of students in the courses has stayed the same (Cree, 1997).

Meidl (1997) surveyed music teachers in thirteen states mostly in the South and West. His findings included that 69% of the schools realized a decrease in student enrollment after adopting a block schedule. Scheduling conflicts was the cause for most of this. Sixty-five percent of the teachers expressed that the quality of their performance groups had decreased following the change to block scheduling. Forty-one percent of instructors were new to their positions following the change of schedules. This indicated that many teachers left the school after the block schedule was adopted (Meidl, 1997).

These studies reveal that answers are still needed to many questions about block scheduling issues. Does the block schedule facilitate teaching better than learning? Do students understand the opportunities afforded them by changing to a block schedule and, if so, do they take advantage of them? Do the advantages of block scheduling include long-term retention? Are some content areas better able to serve students in a modified block schedule? More research on the impact of block scheduling upon a school and its staff and students is a must.

CHAPTER 3

Methodology

Participants

This study involved sixty-six teachers who were employed at Menomonie High School in Menomonie, Wisconsin. A questionnaire was sent via school mailbox to the teachers. Instructions were given to return the completed questionnaire to the researcher's mailbox within nine days.

Design

This was a qualitative study to examine themes from teacher perceptions of adjusting to block scheduling. Responses were organized by departments in order to check for any resulting themes.

Instruments

Teacher's perceptions of advantages and disadvantages of clock scheduling, and their perceptions about adaptations made to accommodate block scheduling, were recorded by a researcher-developed questionnaire. The questionnaire included items about department of teaching, years of teaching experience, and years of teaching in the block schedule. It then asked teachers to describe advantages and disadvantages of the block schedule within their departments. The next item asked teachers to describe any modifications made to courses or services since adopting the block schedule. The last item asked teachers to describe any changes that they would like to make to the current block schedule to benefit their departments.

Procedure

A cover letter was included with each questionnaire. It explained the purpose of the study along with an anonymous consent statement that the participants were asked to

read. The instrument was two additional pages and participants were asked to return the questionnaire by a given date.

Limitations

A major concern was receiving an appropriate number of returned questionnaires from the teachers so that themes could be analyzed. Another concern was that teacher biases could interfere with genuine block scheduling perceptions. Also of concern was that the responses would not be detailed enough to provide an analysis of themes for interpretation.

Chapter 4

Results

The purpose of this study was to investigate teacher's perceptions of the block schedule regarding modifications to departmental courses and services, advantages and disadvantages of the block schedule, and suggestions for modifications to the current block schedule at Menomonie High School during the fall of 1999-2000 school year.

There were 66 questionnaires delivered to Menomonie High School staff. There were 28 surveys returned. The following departments were represented by returned surveys: art, English, family and consumer education, foreign languages, mathematics, music, physical education, science, social studies, technology education, special education, and vocational education/school to work. The following departments were not represented by returned surveys: agriculture, business, and marketing. There was a 42% return rate on all surveys distributed. Participation was voluntary.

Following are the Menomonie High School questionnaire results from the 1999-2000 school year reported alphabetically by departments:

Art

Two questionnaires were returned from the art department. The first had thirty years of teaching experience with four years experience on the block schedule. This teacher listed advantages of the block as more time to complete in depth projects. There is also more time for set-up, cleanup, and critique. Disadvantages were that nine weeks was too short a time to mature in the concepts that need to be practiced over time. Modifications indicated were that a creation of separate sections of 2-D and advanced 2-D art, instead of the advanced students being combined with lower level students, gives the art department the ability to tailor the course for the students' level giving them

increased opportunity. This teacher would recommend improving the current block schedule by having trimesters rather than quarters and having five classes each day. This would allow time for developmental growth.

The second art respondent had twenty-nine years of teaching experience with four years on the block schedule. Advantages indicated were students were able to spend more time each day on their projects, improving the quality of work. The teacher was able to break up each class into segments, such as lecture, presentation, and work time. Disadvantages indicated were that ninety minutes does not equal two forty-five minute class periods. Students have a difficult time staying on task for ninety minutes. Class sizes have increased on the block and there are more students requesting art than the department is able to accommodate. Modifications were that one major unit was dropped from the curriculum in each class because of time constraints. The art history component was given more time along with adding more small group and individual presentations. This teacher would recommend that the block could be improved by implementing trimesters with twelve-week terms. This would allow the department to include those units that were dropped.

English

There were four questionnaires returned from the English department. The first teacher had five years teaching experience with three on the block schedule. She listed advantages as more depth in learning and instruction, and less stress for teachers and students. No disadvantages were noted. Modifications that have been made to accommodate the block were the creation of a new class that was team-taught with a social studies teacher. Elective courses were lessened to accommodate numbers in

required courses. Recommendations to improving the block schedule were to increase staff numbers in all departments to decrease class sizes and increase elective offerings.

The second teacher had ten years teaching experience with four years on the block schedule. Advantages indicated were that more time was given to reading and guided practice during class time. Disadvantages indicated were that having students for the limited time of a semester not as much of the curriculum could be covered.

Modifications included curriculum was compacted, a new journalism course was created, but dropped because it did not work well in the ninety-minute block schedule. Just as students were learning how to write and publish the nine-week term ends and there was no time to implement learning with this particular course. Recommendations to improve the current block schedule were to create some “skinnies” which would work well for a course like journalism because students need more days of the curriculum, not merely minutes. Some sections of required courses should also be offered in smaller blocks for students who would learn better with more time/days.

The third teacher had thirty years of teaching experience with four years being taught on the block schedule. The advantages indicated were that composition and speech courses were integrated and seemed to compliment each other well.

Disadvantages were that not as many speeches were given in the course. Modifications made were to integrate classes. Improvements recommended were to create “skinnies”, and offer more elective courses. She also recommended exploring the impact that the music department has on other departments.

The fourth teacher had thirty-two years experience with four teaching on the block schedule. Advantages indicated were that more courses could be offered, and more

time in a class period was allowed for discussion and project work. Teachers also have fewer preps and longer prep time. The course length is shorter so students and teachers stay fresh with the material. Disadvantages were how to accommodate students who had failed courses. There were not enough teachers to offer the necessary elective courses. Classes are overcrowded and teachers need to work more intensely than before. There are too many singleton courses and little flexibility with transfer students and balance of courses. Teachers have limited time to grade papers and get them back to students as well as students having limited time to practice skills. Modifications made were creating interdisciplinary course with the social studies department, creating additional electives such as literature into film and additional enhanced course offerings. Recommendations for improving the block schedule were modifying the block to accommodate those courses that need to meet for more time over a longer developmental period. This would allow for more skill development and repetition necessary in composition courses. Eliminate elective courses if required courses are overcrowded to eliminate stress for staff and develop a more flexible schedule.

Family & Consumer Education (FACE)

There was one respondent with twenty-four years of teaching experience and four years teaching on the block schedule. The advantages indicated were that teachers and students could go into greater depth during class periods, there was more time for lab experiences, students were able to broaden their course selections, and there was less stress involved for students and teachers because of fewer classes to prepare for. The disadvantages noted were that although classes could go into greater depth during class periods, by eliminating weeks from the course they were able to cover less material.

Sequence areas may miss a block and building a master schedule is difficult.

Modifications that were made were adding one term expansion of fashion & clothing and were also able to include the ninth grade in several courses. Curriculum was also explored and rewritten. The recommendation given to improve the current block schedule was to add staff.

Foreign Language

There were three respondents in the foreign language department. The first had three years of teaching experience with two years on the block schedule. Advantages indicated were that there was plenty of time to complete activities with adequate time to introduce and practice grammatical points or topics. Disadvantages noted were that there was not enough time to absorb information. Students often forget information between terms or never learn it well enough because they were rushed. Modifications were to compact the curriculum and eliminate materials because of time constraints.

Recommendations to improve the current schedule were to have skinnies (45 minutes) at lower levels so students study the language over a longer period. Hopefully this would enable them to retain more information.

The second respondent had six years of teaching experience with four on the block. Advantages indicated were that there was extended time for activities with time to build up momentum. There were also fewer papers to grade at one time. Disadvantages noted were the shortened time frame for classes did not allow students to master the material and retain necessary skills. Instead there were interruptions in a cumulative process that caused difficulties for students. Modifications made were to lower expectations and spend considerable time with review. Recommendations to improve the

current schedule were to either have two skinnie periods or else have an eight-block A/B schedule.

The final respondent in foreign languages had thirty-one years of experience with three plus years teaching on the block. There were no advantages noted. Disadvantages were numerous including that Spanish I class period was way too long—kids are bored and frustrated by the large amount of work and concepts that are thrown at them in just one semester. Students do not have enough time to let things soak in. Classes are way too large, over twenty-two students puts others at a disadvantage. Because so much oral work needs to be used, kids tune out while waiting for their turn to speak. Scheduling is a farce with students waiting one, two, and three semesters to get in. Modifications were limited although they are exploring a modified schedule. This respondent feels that he has had to water down course in order to fit into the block schedule. Recommendations noted were to make Spanish I a 45 minute course each day, all year. This would enable students the time necessary to process information.

Mathematics

There were three questionnaires returned from the mathematics department. The first respondent had sixteen years of teaching experience with five on the block schedule. Advantages indicated were that it offers time to complete projects, labs, and lessons in one class period. It also provides an opportunity to teach using more discovery type methods and students can double up in mathematics in order to get where they need to be. Disadvantages indicated were that students doubling up on math credits could cause problems for college bound students. If all math is completed at one time students are in a position where they will forget important skills and concepts. The amount of material

covered is less. Some teachers have not changed methodology so the whole math department gets a bad rap. There is also difficulty scheduling students from year to year without having a gap between math courses. Modifications made were to offer discrete math and probability and statistics to offer more flexibility in scheduling. AP calculus was also made a three-term course. Recommendations to improve the current block were to make lower level courses three term courses with one term of study skills or ACT/SAT preparation. This would help to build a math foundation that would improve advanced math teaching. Students should be scheduled with the same teacher each term.

The second math respondent had twenty-four years teaching experience with four years teaching on the block. Advantages indicated were that students are able to do application the same day that a concept is taught. There are more lab opportunities to explore application and synthesis. It forces students to be active learners. More time is provided for teachers to do investigation and discovery teaching. Disadvantages include not being able to cover the full curriculum, a large amount of material to be digested by students each day, larger class sizes, longer time periods between math courses, transfer student difficulties, difficulties for substitute teachers, and how to accommodate students who have failed a course. Modifications included piloting a new Algebra I text that is more conducive to the block schedule and made the AP course three terms.

Recommendations that would improve the current schedule are modifying the block to trimesters with twelve weeks per term and a five period day with sixty-five to seventy minutes per class. Some classes would run twelve weeks while others would run twenty-four weeks to allow more time to cover material.

The final math respondent had thirty-three years of teaching experience with four years teaching on the block. An advantage indicated were more details on concepts and in-depth study on certain topics could be achieved. Disadvantages noted were that subject matter has been eliminated because of time limitations. Modifications were compacting curriculum without compromising the credibility of the course. A recommendation to improve the current block schedule was to require only students in the enhanced track be able to take two math courses in the same school year.

Music

There were two respondents from the music department. The first had seven years of teaching experience, with two plus years teaching on the block schedule. An advantage indicated was more time to do varied activities with students. Disadvantages included scheduling creates conflicts for students and that music class numbers would increase if the schedule were more accommodating. Modifications included adapting curriculum and creating courses at more flexible time periods.

Recommendations to improve the current block schedule would be to schedule music classes first because the number of students involved in those classes is generally larger than other classes. Skinnies could also be developed with music alternating with other classes during one of the block periods as a way to increase student involvement. Another option would be alternating day schedules to alleviate the conflicts that arise with the present schedule.

The second music respondent had eight years of teaching experience with four years teaching on the block. Advantages indicated were with increased time teachers are able to create a stronger product in performance-based classes. The depth of teaching has

also greatly increased. Disadvantages included a lack of continuity, difficulty scheduling music lessons, teacher loads doubled with the four period day increasing burn-out levels, and some students feel that there is not time to take electives like music in the block schedule. Modifications included creating modified courses and performances to better fit the schedule. Recommendations to improve the current block schedule were to create an A/B schedule. This would address continuity issues while still allowing for longer class times and courses to meet daily if necessary.

Physical Education

There were two physical education respondents. The first had twenty-six years of teaching experience with three years teaching on the block schedule. Advantages indicated were more time for activities that take more time such as bowling and skiing. Disadvantages included less content covered in regular classroom teaching assignments. Modifications made were adding electives without increasing staff. Recommendations to improve the current block schedule would be to increase staff in all departmental areas and replace all retiring teachers with new staff.

The second respondent in physical education had twenty-seven years of teaching experience but did not indicate how many years experience with teaching on the block. Advantages noted were length of time students are on task, facility and equipment management, and increased exposure to elective course offerings. Disadvantages indicated were the gaps between physical education courses, sometimes as long as five to six terms. The required courses are in a sequence so the gaps hurt content delivery. Modifications included a change in teaching delivery. Recommendations that would

improve the current block schedule included scheduling students so that they have less time and fewer gaps between required courses.

Science

There were four respondents from the science department. The first had one year of teaching experience with one year teaching on the block. Advantages indicated were longer labs with no break-ups. There were no disadvantages noted. Modifications were not noted because the block was already in place. No recommendations for improvement were given.

The second science department respondent had six plus years of teaching with three plus years teaching on the block. Advantages indicated were being able to start and finish most labs in one period, adding to the variety of activities that can be completed. For example, lecture, demonstration, lab, and group activities can be completed all in one period. The block provides a much more relaxed daily schedule. Disadvantages noted were that teachers are not able to cover as much content. Some students also have difficulty keeping up with the pace or processing all of the fundamentals during the class period. There is not enough time to absorb certain subject matter or concepts. Modifications were adding a new course Chem/Comm and increasing chemistry to three terms. Recommendations to improve the current block schedule include increasing staff size and decreasing class size to directly benefit students.

The third science respondent had thirty-years of teaching experience with four years teaching on the block. Advantages noted were longer periods gives time for completion of lab work and more guided instruction during the class period. Teachers see fewer students per day and preparation time is longer. Disadvantages noted were not

having study halls for students and not having a place to put students who are failing. Curriculum content is often watered down, thus not meeting the needs of gifted students. Abstract concepts such as those in chemistry need more developmental and processing time. It also limits course opportunities for students because of too few electives. Modifications included adding a term to chemistry to make up for content lost in two terms, physics, biology, and physical science had to cut out about a third of the content. Recommendations to improve the current block schedule were to meet two days one week and three days the next to make it a full year course with longer periods.

The final science respondent had thirty-years teaching experience with four years teaching on the block. Advantages indicated were that concepts could be introduced, and investigations through process learning can be conducted with summary and conclusions being reached. Process or hands-on learning can give students more in-depth experiences and opportunities. It creates a less stressful learning atmosphere. Disadvantages include covering less content and student absences make labs difficult to make-up. Lack of study halls is also a detriment to students. Modifications include adding a term to anatomy & physiology. Curriculum was also eliminated. Recommendations to improve the current block schedule include adding additional electives such as geology and astronomy and increasing staff.

Social Studies

There were two respondents from the social studies department. The first had twenty-two years of teaching experience with four years teaching on the block. Advantages indicated were greater depth and understanding of material by students, and improved relationships between teachers and students. Disadvantages noted were

concern over not being able to cover as much of the curriculum. Modifications included some course content was compacted and course outlines were modified.

Recommendations for improving the current block schedule include examine the use of a three-term school year, courses would be increased in time to better accommodate the demands of a lengthy curriculum.

The second social studies respondent had thirty-years of teaching experience with four years on the block. Advantages indicated was the development of lessons around higher order critical thinking strategies with more meaning. Disadvantages were the loss of time with students so less content could be covered. Modifications were integration of U.S. History with American Literature, moving colonial U.S. History into a 9th grade civics course, which helps compensate for lost teaching time. Recommendations for improving the current block schedule included converting the schedule to a trimester with three, thirteen week grading periods. This would allow not only the depth that you can go into while allowing more topics to be covered.

Technology Education

There were two respondents in the technology education department. The first had twenty-seven years teaching experience with four years teaching on the block. Advantages noted were the uninterrupted hours of productive student work time. There were no disadvantages, modifications, or recommendations noted.

The second respondent had thirty-one years of teaching experience with four years teaching on the block. Advantages indicated were advanced level course have more work time. Disadvantages included too much lecture and demonstration time, too much material to be covered in a short period of time, and student motivation to remain

on task after finishing one lab time is difficult. Younger students have difficulty with the longer class periods. Modifications noted were compacting curriculum in all courses. Recommendations to improve the current block schedule include having introductory courses shortened to fifty minutes.

Special Education

There were two respondents in the special education department. The first respondent had five years of teaching experience with three years on the block. Advantages indicated were fewer daily classes for students to organize and complete work for, more options for electives, more remedial courses, more in class time to work and get additional help from teachers, fewer classes to juggle, and special education teachers can team with regular teachers in mainstream classes. Disadvantages include special education teachers not seeing all the students that they are case managers for every term and no study halls to help students complete work. Modifications included offering more self-contained and one on one or small group courses. There is an increased opportunity to team-teach with regular education teachers. Study skills courses were increased to two terms instead of one. Recommendations to improve the current block schedule include more one on one time with students who are failing course.

The second respondent had twenty-five years of teaching experience with four years teaching on the block. Advantages indicated were student success, students with learning disabilities can adjust better two four teachers rather than seven, they are able to organize better with fewer courses, and length of class allows students to settle and get work done with supervision. Disadvantages include large class sizes, no structured study hall time, scheduling difficulties, and delivery of instruction has not changed in some

circumstances. Modifications noted were adding more content to computer literacy due to added time, increased teaming opportunities because of loss of study halls, improving teacher delivery with a variety of activities in lesson planning. Recommendations to improve the current block schedule include spending quality time on the master schedule to alleviate scheduling conflicts.

Vocational Education (School to Work)

There was one respondent in the vocational education department. This respondent had twenty-three years of teaching experience with four years teaching on the block. Advantages indicated were more time for helping individual students in class and more options for class activities. There were no disadvantages noted. Modifications included opening courses up to lower grade level students. A recommendation noted to improve the current block schedule was to create some skinnies to modify the block.

CHAPTER FIVE

Summary, Conclusions, & Recommendations

Summary

This study was developed to investigate teachers' perceptions of the block schedule regarding modifications to departmental courses and services, advantages and disadvantages of the block schedule, and suggestions for modifications to the current block schedule at Menomonie High School in Menomonie, Wisconsin. A researcher-developed questionnaire was sent via school mailbox to sixty-six Menomonie High School teachers, with twenty-eight teachers returning the questionnaire and participating in the study.

The findings indicate that modifications made to departmental courses and services included: the compacting of curriculum, the addition of terms to some courses, the inclusion of additional grade levels in some courses, and the creation of new courses.

The advantages that were indicated included: longer class-time allowed for more in-depth discovery type learning, varied teaching practices and activities, integration of content areas such as U.S. history and U.S. literature and speech and composition, fewer teacher preparations, longer preparation time, fewer courses for students to manage, less stress for teachers and students, improved relationships between students and teachers, and the creation of new elective course offerings.

The disadvantages indicated included: less developmental time for learning, increase in class sizes, some curriculum lost due to compacting, some departments could not service all student requests, some departments dropped electives to accommodate more sections of required courses, no built in safety net for students who are failing,

difficulty of placing transfer students on the schedule, class balances unequally distributed, some students had difficulty maintaining attention for the longer period of time, retention loss during gaps between related courses, curriculum watered down due to necessary review time, difficulties for substitute teachers, no study halls for remediation, and student absences are more detrimental.

Suggestions for modifying the current block schedule at Menomonie High School included: going to a trimester schedule with twelve or thirteen week grading terms and five sixty to sixty-five minute periods (some courses would be two terms), increase staff in all departments, modify the block with skinnies (shorter classes meeting every day or alternating with other classes), implementing an A/B block schedule, adding electives in all areas, keeping students with the same teacher for all terms of a course, building in more one on one time for students who are failing, and having three terms for lower level courses and including study skills or ACT/SAT preparation.

Conclusions

This study supports previous studies concerning the effects of the block schedule. Salvaterra & Adams (1996) reported that the majority of teachers were able to develop varied activities in the classroom. Some teachers found that students could not maintain attention for the longer class period. The theme of varied activities in the classroom was reported by a majority of the Menomonie High respondents in this study, but only a few mentioned the difficulty some students had in maintaining attention.

Liu & Dye (1998) reported that teachers perceived the block schedule as more opportunity for students to focus on their subjects, but also voiced concerns about long-term retention and elapsed time between related courses. These themes were also cited by the majority of the Menomonie High School respondents in this study.

Dow & George (1998) reported that more students enrolled in elective courses and more students experienced more positive relationships with teachers. The teachers said that the new schedule encouraged more creative and innovative teaching methods. The teachers were also concerned with learning retention. Again, the Menomonie respondents overwhelmingly echoed the theme of creative and innovative teaching methods. Some cited more positive relations with students as a theme, and some respondents reported that some departments could not serve all of the students who requested a course, indicating that students were enrolling in more elective courses. In this study, the retention of learning surfaced as a theme of major concern.

Queen, Algozzine, & Eaddy (1996) sighted flexibility in classroom instruction, fewer preparations and longer planning periods, and more in-depth study as advantages of block scheduling. Disadvantages included loss of retention from one level of a course to the next, difficulty with transition for students transferring who were not on a block schedule, and a limited number of electives being offered. In this study, Menomonie High respondents also cited all of these themes of advantage and disadvantage.

Kramer (1996) focused on math within the block schedule. Algebra, the foundation for higher-level math courses, was a major concern. Modifications were arranged within the block to better serve lower level students. In this study, Menomonie

High math respondents' themes of concern included time gaps between related courses with resulting retention loss. A suggestion for modification of the block schedule was to extend the lower level courses to three terms.

Meidl (1997) reported that the quality of music performance groups had decreased and that scheduling conflicts in the music area was a major concern. In this study, Menomonie music respondents also cited scheduling conflicts as a major theme of concern, but indicated that the increased class time helped to create stronger performance groups.

The Menomonie High respondents were overwhelmingly positive about the block schedule. The advantages far outweighed the disadvantages, but the respondents' wanted their themes of concern to be addressed in order to make an even better schedule.

Recommendations

The following recommendations were made for future research on the effects of block scheduling.

1. Conduct future studies with schools from all states.
2. Continual review of schools that adopted block scheduling as to the effects of teaching and learning.
3. Conduct continual studies on schools that have adopted the block schedule and have continued with it, changed back to tradition, or made modifications.
4. Conduct empirical studies of student achievement in content areas on the block.

The following recommendations were made for future application.

1. Conduct comparison research on the block vs. trimester schedule to address block schedule disadvantages.

2. Examine the long-term effects on student achievement.
3. Examine student perceptions of the block schedule.

References

- Canady, R. L., & Rettig, M. D. (1995). Block scheduling: A catalyst for change in high schools. Princeton, NJ: Eye on Education.
- Carroll, J. M. (1990). The Copernican plan: Restructuring the American high school. Phi Delta Kappan, 71, 358-365.
- Carroll, J. M. (1994). The Copernican plan evaluated: The evolution of a revolution. Phi Delta Kappan, 76, (2) 105-113.
- Cree, D. F. (1997). Adapting to block scheduling. Music Educators Journal, 84, 10.
- Dow, J. & George P. (1998). Block scheduling in Florida high schools: Where are we now?. NASSP Bulletin, 82, 92-110.
- Edwards, C. M. (1995, November). The four by four plan. Educational Leadership, 16-19.
- Grinsel, J. G. (1989). Flexible scheduling: A second change? American Secondary Education, 2, 29-31.
- Hackman D. G. (1995, November). Ten guidelines for implementing block scheduling. Educational Leadership, 24-27.
- Howard, E. (1997). Block scheduling and advanced placement mathematics: When tradition and reform collide. American Secondary Education, 26, 13-16.
- Huff, A. L. (1995, May). Flexible block scheduling: It works for us. NASSP Bulletin, 19-21.
- Kramer, S. L. (1996). Block scheduling in high school mathematics instruction. Mathematics Teacher, 89, 758-68.

Liu, J. & Dye J. F. (1998, March). Teacher and student attitudes toward block scheduling in a rural school district. American Secondary Education, 26, (3), 1-7.

Miedl, K. (1997, July). Problems with block scheduling. Music Educators Journal, 84, 11.

National Commission on Excellence in Education. Prisoners of time: Report of the National Education Commission on time and learning. Washington, D. C.: U. S. Printing Office, 1994.

O'Neil, J. (1995, November). Finding time to learn. Educational Leadership, 11-15.

Queen, J. A., Algozzine, B., Eaddy, M. (1996). The success of a 4 X 4 block scheduling in the social studies. The Social Studies, 87, 249-53.

Reis, S. M., & Renzulli, J. S. (1992). Using curriculum compacting to challenge the above-average. Educational Leadership, 50 (2), 51-57.

Salvatterra, M., & Adams, D. C., (1996, August). Teacher perceptions of intensive time scheduling in four high schools. American Secondary Education, 24, 23-29.

Sizer, T., (1992). Horace's school: Redesigning the American high school. New York: Houghton Mifflin.

Wronkovich, M., (1998, June). Block scheduling: Real reform or another flawed education fad? American Secondary Education, 26 (4) 1-6.

