

1-1-1997

An Investigation Of Block Scheduling In Illinois High Schools

Bruce Owen

Eastern Illinois University

This research is a product of the graduate program in [Educational Administration](#) at Eastern Illinois University. [Find out more](#) about the program.

Recommended Citation

Owen, Bruce, "An Investigation Of Block Scheduling In Illinois High Schools" (1997). *Masters Theses*. 214.
<http://thekeep.eiu.edu/theses/214>

This Thesis is brought to you for free and open access by the Student Theses & Publications at The Keep. It has been accepted for inclusion in Masters Theses by an authorized administrator of The Keep. For more information, please contact tabruns@eiu.edu.

LB
1861
.C57X
E34
1997
09
COPY 2

AN INVESTIGATION OF BLOCK SCHEDULING
IN ILLINOIS HIGH SCHOOLS

OWEN

THESIS REPRODUCTION CERTIFICATE

TO: Graduate Degree Candidates (who have written formal theses)

SUBJECT: Permission to Reproduce Theses

The University Library is receiving a number of requests from other institutions asking permission to reproduce dissertations for inclusion in their library holdings. Although no copyright laws are involved, we feel that professional courtesy demands that permission be obtained from the author before we allow theses to be copied.

PLEASE SIGN ONE OF THE FOLLOWING STATEMENTS:

Booth Library of Eastern Illinois University has my permission to lend my thesis to a reputable college or university for the purpose of copying it for inclusion in that institution's library or research holdings.

Bruce Owen
Author

5/6/97
Date

I respectfully request Booth Library of Eastern Illinois University not allow my thesis to be reproduced because:

Author

Date

An Investigation of Block Scheduling

in Illinois High Schools

(TITLE)

BY

Bruce Owen

Field Experience

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Specialist in Education

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

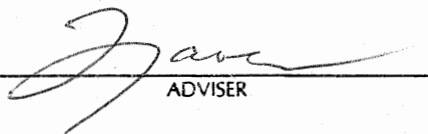
1997

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

5-13-97

DATE



ADVISER

May 13, 1997

DATE



DEPARTMENT HEAD

Abstract

The purpose of this study was to investigate the use of block scheduling in Illinois high schools and to identify the advantages and disadvantages of block scheduling as perceived by high school principals in Illinois. The review of literature and research on block scheduling indicated that schools using block scheduling maximized use of allocated instructional time. Students could do homework successfully because their work was monitored, questions were answered, and encouragement was offered at the time when the intervention had the most positive effect on achievement.

A survey instrument was sent to Illinois high school principals using block scheduling in their schools. Fifty-six of the 81 principals returned the survey representing a 69% response rate. Principals were asked questions about their perceptions of the block eight schedule and its effectiveness in their high schools. Sixty-eight percent of the principals stated they had been using block scheduling for two to four years. Findings indicated 88% of the schools using block scheduling use the block eight schedule. Of the principals surveyed, 100% said they were using the traditional 6, 7, 8 period schedule before implementing block scheduling. Seventy-five percent of the principals stated they had to increase their number of teaching staff after implementing block scheduling. Of the principals surveyed, 57% stated they had a significant decrease in student discipline referrals with the use of block scheduling. Seventy-five percent of the principals surveyed reported a significant increase in student curriculum offerings due to the implementation of block scheduling. The results of the survey indicated that a majority of the principals surveyed viewed block eight scheduling as a positive alternative in creating effective schools. A majority of the principals surveyed indicated teachers were rejuvenated and

students were better motivated, and overall attendance and student attitudes seemed to improve. The results of the study should help school officials in making decisions concerning types of schedules they want to use in their schools.

Table of Contents

CHAPTER 1: Introduction	1
Purpose of the Study	1
Background and Significance of the Study	1
Objectives of the Study	2
Definitions of Terms	3
Assumptions of the Study	4
Delimitations of the Study.....	4
CHAPTER 2: Review of Literature and Research	6
CHAPTER 3: Design of Study.....	13
General Design of Study	13
Sample and Population	13
Data Collection and Instrumentation	14
Data Analysis	16
CHAPTER 4: Results of The Study.....	17
CHAPTER 5: Summary, Findings. Conclusions and Recommendations.....	28
Summary	28
Findings	30
Conclusions	31
Recommendations	32
REFERENCES	34
APPENDIX A - Block Scheduling Survey	36
APPENDIX B - Cover Letter	38

CHAPTER 1

Introduction

Purpose of the Study

Historically, the school schedule has focused upon minimizing conflicts in room assignments, collecting students' choices, assigning teachers to sections, and meeting contractual requirements. School scheduling has been a problem from the very beginnings of the school system as we know it today. The purpose of this study was to investigate the use of the block scheduling in Illinois high schools and to identify the advantages and disadvantages of block scheduling as perceived by selected high school principals in Illinois.

Background and Significance of the Study

School scheduling is far more important than the simple mechanical assignment of students to teachers in rooms for the school day. The power to address problems, the power to facilitate the successful implementation of programs, and the power to make possible the institutionalization of effective instructional practices lies within the schedule (National Education Commission on Time and Learning, 1994). Scheduling is often thought of as the traditional six to ten period day with classes of forty to fifty minutes in length (Carroll, 1990). Reform and restructuring have become commonplace "buzz" words in the education community. The pressure to change and to address the concerns articulated at the national, state, and local levels, and to meet the challenges of the 21st century keeps educators looking for better ways to implement the courses presented to students (National Education Commission on Time and Learning, 1994).

With few exceptions, today's schools open and close their doors at fixed times in the morning and early afternoon. A school in one district might open at 7:30 a.m. and close at 2:15 p.m., while in another school the day might run from 8:00 a.m. to 3:00 p.m. The school year usually lasts nine months beginning in late summer and ending in late spring. Many schools offer a six-period day, with about 5.6 hours of classroom time each day. Frequently, all subject areas, no matter how complex or how simple, are assigned an impartial average of 51 minutes per class period, regardless of how well or poorly students comprehend the material. The normal required attendance days average from 175-180 days per school year (National Education Commission on Time and Learning, 1994).

Today's school schedule governs how families organize their lives, how administrators oversee their schools, and how teachers work their way through the curriculum. Above all, it governs how material is presented to students and the opportunity they have to comprehend and master it.

The short term effect of this study should help to determine if the move to the block school schedule will benefit the Neoga Jr./Sr. High School, Neoga, Illinois, where the researcher is employed as assistant Principal. The results of the study were made available to Bill Steichmann, Superintendent of Neoga community Unit District #3, and David Carpenter, Principal of Neoga Jr./Sr. High School. The long term effects of this study should provide useful information to other high school officials as they make decisions about scheduling.

Objectives of the Study

This study identified the perceptions of high school principals in the state of Illinois on the use of block scheduling. The specific objectives of this study were:

1. To determine if block scheduling is more costly than the traditional schedule.
2. To determine if block scheduling is successful in accommodating increasing student achievement in Illinois high schools.
3. To determine the effectiveness of block scheduling for sustained and/or increase in student attendance.
4. To determine the effects of block scheduling on student discipline referrals.
5. To determine the effectiveness of block scheduling for sustained and/or decreased student failures.
6. To determine the effects of block scheduling on curriculum offerings.
7. To determine the effects of block scheduling on teacher effectiveness.

Operational Definitions

The following are operational definitions that were used in this study:

Traditional Classic Schedule. A high school schedule, with six to ten periods, with equal minutes per period, offered within the context of the instructional day.

Modified Traditional Schedule. A traditional or classic type instructional schedule with a variation provided to the day or week.

Block-Type Schedule. A schedule characterized by offering a set of extended classes on one day, with a different set of extended classes the next, rotating every other day.

Modified Block-Type Schedule. A regular block-type schedule with a variation to the day or week.

Modular Schedule. A schedule characterized by dividing the instructional day into modules, usually between ten to twenty minutes each, allowing for flexible class offerings by the day or week.

Carnegie Unit. 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 the student one "unit" of high school credit.

Block Eight. A schedule that consists of eight classes with four classes meeting every other day. There are A (class) days and B (class) days. Each class meets for a total of six to seven hours every two weeks.

Assumptions

Following are assumptions made by the researcher concerning this study:

1. The principals responded honestly to the survey instrument.
2. The principals who responded to the survey instrument were representative of principals of all Illinois high schools with block scheduling.

Delimitations

The following factors were placed outside of the scope of this study:

1. The availability of staff development to classroom teachers in making the change to block scheduling.
2. The degree of support from the school board and/or the community for the change to block scheduling.
3. The level of knowledge of the classroom teachers concerning how to teach in the block schedule.

4. The availability of financial resources to implement block scheduling for instructional use.

CHAPTER 2

Review of Literature and Research

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 two, three or four-day a week schedules" (p. 112). 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 four high school years" (p. 114).

The every-day-period high school schedule, which developed from the recommendations of the Committee of Ten and the development of the Carnegie Unit, has remained remarkably unchanged for the past 70 years, except for the addition in some schools of an extra period or two. There was, however, one attempt, during the 1960's and early 1970's, to break away from this lockstep format-- the flexible schedule (Ziemke, 1992).

Efforts to restructure secondary schools often focus on changing the daily schedule to accommodate different approaches to delivering the curriculum. Block eight scheduling was first implemented at Granite School District in Salt Lake County, Utah, in the mid-1970's (Ziemke, 1992). In Illinois, the first four districts to implement block eight scheduling were Seneca High School, Coal City High School, Streator-Woodland High School, and Byron High School.

Members of the National Education Commission on Time and Learning, which was established in 1991 by Congress to conduct a comprehensive study of the relationship between learning and scheduled time in America's schools, reported that "the degree to which today's American school is controlled by the dynamics of clock and calendar is surprising, even to people who understand school operations" (National Education Commission on Time and Learning, 1994, p. 7). "The results are predictable," according to the Commission, "The school clock governs how families organize their lives, how administrators oversee their schools, and how teachers work their way through the curriculum. Above all, it governs how material is presented to students and the opportunity they have to comprehend and master it" (p. 8).

Cawelti (1994), provided a broad national picture of the overall high school restructuring movement and the place of the innovation known as "block scheduling" within that movement. "Block scheduling" was defined in the study as the following: "At least part of the daily schedule is organized into larger blocks of time to allow flexibility for varied instructional activities" (p. 23).

In the last ten years, block scheduling has changed the bell schedule and teaching practices in schools across the country. According to Michael Rettig, an assistant professor of education at James Madison University in Harrisonburg, Virginia, and co-author of Block Scheduling: A Catalyst for Change in High Schools, about one third of the high schools in the United States are using some type of block scheduling (Jones, 1995). He reported that many school employees were fascinated by the seemingly limitless possibilities and variations of block scheduling. Rettig went on to say that teachers on a block schedule often wind up teaching more classes during the year, but

most teachers see the extra classes as a fair trade-off because on the block schedule they teach fewer students per day and usually have longer preparation periods.

When deciding to implement a block schedule, there are some suggestions one must consider in order to make the right decision:

1. Pick a schedule that fixes the things you want to fix. Both a 4 x 4 and a block eight or rotating schedule will offer more courses to students, for example, but if you want a smaller student-teacher ratio, then the 4 x 4 model makes better sense.
2. If you pick a block schedule, make a three or four year commitment to trying it out.
3. Check on district and state policies that might be affected.
4. Caution your teachers against trying to plan lessons too far ahead for the first year.
5. Make sure your substitute teachers understand your new schedule.
6. Limit your visitors.
7. Watch for students who need early intervention.
8. Give yourself time to change.
9. Recognize that you are changing more than the length of class periods.
10. Don't expect the block schedule to solve all your problems (Schoenstein, 1995, p. 21).

The block four schedule is one schedule being used with increasing frequency across the country, greatly reducing fragmented instruction. In the block four schedule, students spend one block of the day (about 90 minutes) in language arts, a second block in mathematics, and a third block in either social studies or science. The block of social

studies/science is rotated every other day, every other unit, by semester, or on some other basis. Students spend the fourth block of the day in physical education, music, and/or exploratory courses, which meet for 90 minutes every other day. They attend only three academic courses daily (Canady and Rettig, 1995).

A question raised about block schedules is whether they permit as much of the curriculum to be covered as the traditional schedule. Depending upon the schedule a school is currently using, and the particular block schedule it switches to, the total number of minutes devoted to each course may decline. Some educators using block schedules say that certain classes cover just as much ground under block schedules; others say a little less. Ultimately the important issue would be how much students have learned. Students in block schedules have not scored any lower on achievement tests than those on traditional schedules according to educators (O'Neil, 1995).

The 4 x 4 schedule has many advantages over the traditional high school schedule. For teachers, the 4 x 4 provides a more manageable schedule. Teachers in schools using 180 day courses with either a traditional or block schedule teach five or six classes of 25-30 students at a time. In a 4 x 4 school, they teach six classes, but have only three each semester with no more than 75-90 students at a time. In addition to fewer class preparations and fewer students per semester, 4 x 4 teachers can devote 25 % their day to planning instruction (Edwards, 1995).

Hackman (1995) identified the following ten guidelines for implementing block scheduling:

1. Employ a systems thinking approach. Do not implement a block schedule because it is the latest trend, but because it empowers teachers to rethink and restructure their system.
2. Secure the support of your superiors.
3. Understand the change process. Allow teachers sufficient time to assess how they feel about the new paradigm and to prepare for it.
4. Involve all stakeholders. Building administrators must philosophically support any restructured schedule.
5. Consult sources outside the school.
6. Brainstorm creative alternatives.
7. Examine the budgetary implications.
8. Plan faculty in-services.
9. Include an evaluation component.
10. Share and celebrate your successes (p. 25-26).

Block eight scheduling necessitates changes in pedagogy. Teachers find it necessary to vary instructional techniques such as lecture, collaborative learning, lab experiments, and problem solving strategies. No longer can teachers lecture for an entire class period. A variety of teaching strategies should be used in the extended block of instructional time. Ten classroom management tips effective with 80-minute periods were suggested by Seneca, Illinois teachers:

1. Minimum of three activities each day.
2. Vary your activities--change order.

3. Always review 10-15 minutes each class period on previous discussion.
4. Use overhead projector, if possible--great for review.
5. Do not forget the media center.
6. Put assignments on the board each day.
7. Skills notebook (assignment notebook) for each student.
8. Make-up work--good record keeping on student absences.
9. Quality--not quantity.
10. Homework--take it easy (Seneca High School 8-Block, 1994).

Many schools have developed alternatives to the block schedule. For instance, Daviess County High School in Owensboro, Kentucky, has implemented a modified block schedule. Monday, Thursday, and Friday will follow the traditional school day schedule of six periods, each 55 minutes long. Tuesday and Wednesday will become lab days. Even number periods will meet Tuesday for two hours each and odd number periods will meet Wednesday for two hours each. After each two hour class, students will have a 16 minute break (Keller, 1994).

Hononegah Community High School in Rockton, Illinois, uses an alternate schedule called the 7 x 2 schedule. Hononegah schedules all 7 classes on Mondays, which meet for 52 minute periods; on Tuesday, periods 1, 2, 3, and 4 meet for 95 minute periods; on Wednesdays, periods 5, 6, and 7 meet for 95 minute periods; on Wednesday, teachers have scheduled collaboration time from 7:45-9:15 a. m., and students begin classes at 9:26 a. m. (late arrival). On Thursday, periods 1, 2, 3, and 4 meet for 95 minute periods; on Fridays, periods 5, 6, and 7 meet for 95 minute periods and students are scheduled into a homeroom/activity period from 9:26-11:01 a. m. for personalization

activities, community caring, pull out programs, college recruiters, class rings/announcements, pictures, assemblies, and standardized testing (The 7 Block Schedule x 2, 1996).

In the fall of 1994, Parry McCluer High School in Buena Vista, Virginia, began using a trimester schedule with extended learning. In such a plan, students enroll in two classes per trimester; each class meets for two hours in the morning and reconvenes for an additional 45 minutes of extended learning time each afternoon. Nearly all students require this additional time for learning; however, a few have been permitted to contract out of the extended learning time for advanced study with another faculty member. An equally small number of students require more time than can be allocated each trimester to complete course objectives. If these students have worked hard and simply need more time, they may be granted an "Incomplete," which they can make up during extended learning time of the next trimester (Canady and Rettig, 1995).

Because so many experiments with scheduling are being introduced into schools, universities are beginning to research changes. For example, the Copernican Plan in which students take one four-hour class per day for 30 days was evaluated by a team from Harvard University. Through surveys, interviews, and classroom observations, the evaluators found that, as a result of the new schedule, "students were better known by their teachers, were responded to with more care, did more writing, pursued issues in greater depth, enjoyed their classes more, felt more challenged, and gained deeper understandings" (Willis, 1993). As this study suggests, similar results could be documented in other schools.

CHAPTER 3

Design of the Study

General Design of the Study

The purpose of this study was to investigate the use of the block scheduling in Illinois high schools and to identify the advantages and disadvantages of block scheduling as perceived by selected high school principals in Illinois. Specific objectives were:

1. To determine if block scheduling is successful in accommodating increasing student achievement in Illinois high schools.
2. To determine if block scheduling is more costly than the traditional schedule.
3. To determine the effectiveness of block scheduling for sustained and/or decreased student failures.
4. To determine the effectiveness of block scheduling for sustained and/or increase in student attendance.

Sample and Population

The scope of the research was centered around high schools in Illinois using block scheduling. The Illinois State Board of Education identified some of the schools used in the research, but the majority of the schools surveyed came from information provided by the 56 Illinois Regional Offices of Education through phone interviews with the regional superintendents or someone from their offices. The total number of high schools identified in Illinois with block scheduling programs was 81 which is equal to the total number of surveys mailed. Surveys were numbered for compilation purposes, but the anonymity of participants was maintained.

Data Collection and Instrumentation

The researcher identified high schools in Illinois using block scheduling. Once identified, the principals of these schools were sent a survey to complete concerning their existing programs (Appendix A).

A cover letter was included with each survey (Appendix B). Principals were asked to respond on the survey on the use of block scheduling in their schools. The list of questions was compiled by the researcher in consultation with Superintendent Bill Steichmann and Principal David Carpenter of Neoga School District #3, Neoga, Illinois, as well as Dr. Donald W. Smitley of Eastern Illinois University. The instrument was revised in mid-December of 1996 before the surveys were sent to the principals in January, 1997.

The survey instrument was the basis for meeting the specific objectives of this study. It sought principals' perceptions and facts related to block scheduling in Illinois. The following data were collected using the Block Scheduling Survey to measure and evaluate each of the corresponding specific study questions:

1. Principals used a check mark to indicate the student population of their high schools using block scheduling with categories of 0-200, 201-400, 401-750, and over 750 student population.
2. Principals used a check mark to indicate how long the school had been using block scheduling with categories of less than one year, two-four years, five-eight years, and more than eight years.
3. Principals used a check mark to indicate what type of block scheduling they were using with categories of 4 x 4, block eight, modified block, modular block, modular schedule, and other.

4. Principals used a check mark to indicate the schedule used prior to implementing block scheduling with categories of traditional 6, 7, or 8 period day; modified traditional schedule; block schedule; and other.

5. Principals used a check mark to indicate if they had to increase/decrease staff after implementing block scheduling with categories of no change, added staff, decreased staff, number added, and number decreased.

6. Principals used a check mark to indicate how operating costs were effected after implementing block scheduling with categories of no change, increased or decreased, as well as the increased cost per student change after implementing block scheduling with categories of \$0-\$100, \$101-\$250, \$251-\$500, \$501-\$750, \$751-\$1,000, and over \$1,000.

7. Principals used a check mark to indicate the change in student achievement with categories of no significant change in student achievement, student achievement significantly decreased, and student achievement significantly increased.

8. Principals used a check mark to indicate the change in student attendance with categories of no significant change in student attendance, student attendance significantly decreased, and student attendance significantly increased.

9. Principals used a check mark to indicate the change in student discipline referrals with categories of no significant change in student referrals, student referrals significantly decreased, and student referrals significantly increased.

10. Principals used a check mark to indicate the change in student failures with categories of no significant change in student failures, student failures significantly decreased, and student failures significantly increased.

11. Principals used a check mark to indicate the change in curriculum offerings with categories of no significant change in student curriculum offerings, student curriculum offerings significantly decreased, and student curriculum offerings significantly increased.

12. Principals used a check mark to indicate the change in teacher effectiveness with categories of no significant change in teacher effectiveness, teacher effectiveness significantly decreased, and teacher effectiveness significantly increased.

13. Principals used a check mark to indicate the change in overall value of block scheduling versus traditional schedule with categories of recommend, do not recommend, no opinion, and comments.

Data Analysis

The data were collected and the results compiled by the researcher using descriptive statistics. The data in Chapter 4 were reported through figures which represent responses by percentages.

CHAPTER 4

Results of the Study

The purpose of this study was to investigate the use of the block scheduling in Illinois high schools and to identify the advantages and disadvantages of block scheduling as perceived by selected high school principals in Illinois. Specific objectives were:

1. To determine if block scheduling is more costly than the traditional schedule.
2. To determine if block scheduling is successful in accommodating increasing student achievement in Illinois high schools.
3. To determine the effectiveness of block scheduling for sustained and/or decreased student failures.
4. To determine the effects of block scheduling on curriculum offerings.
5. To determine the effects of block scheduling on teacher effectiveness.
6. To determine the effectiveness of block scheduling for sustained and/or increase in student attendance.
7. To determine the effects of block scheduling on student discipline referrals.

The Block Scheduling Survey was sent to 81 principals who were identified by the Illinois State Board of Education and the Regional Offices of Education in Illinois as using block scheduling. Of the 81 surveys distributed, 56 (64%) were returned.

Data have been analyzed and summarized in relation to the impact block scheduling has had on student discipline referrals and student achievement in Illinois high schools. The format for the results includes a narrative description of the actual percentage of responses for each item of the survey followed by a table summarizing the results.

Eighteen of the 56 surveyed schools (32%) had student populations of 0-200 students, 23 of the schools (41%) had student populations of 201-400 students, 11 of the schools (20%) had student populations of 401-750 students, and 4 of the schools (7%) had student populations of over 750 students.

Table 1 indicates the length of time in years and the percentages of principals using block scheduling in Illinois high schools. As shown, 17% of the principals surveyed indicated their schools had been using block scheduling for less than one year, 68% had been using block scheduling for two-four years, and 13% had been using it for five-eight years.

Table 1

Number of Years and Percentages of Schools That Have Been

Using Block Scheduling

NO. OF YEARS	NO. OF SCHOOLS	% OF SCHOOLS
2-4	38	68%
Less than 1	10	17%
5-8	7	13%
More than 8	1	2%
TOTAL	56	100%

Table 2 indicates the type of block scheduling school(s) utilized in the respondents' schools. Each respondent was able to check the schedule which applied to his/her school

Table 2

Number and Type of Block Schedule Utilized by Schools

TYPE OF SCHEDULE	NO. OF SCHOOLS	% OF SCHOOLS
Block Eight Schedule	49	88%
4 x 4	4	7%
Modified Schedule	3	5%
Modular Schedule	0	0%
Total	56	100%

with a place for other types of schedules not listed on the survey. Eighty-eight percent of the respondents indicated that their schools were using the block eight schedule.

The principals were asked what type of schedule they were using prior to implementing block scheduling. All fifty-six of the surveyed schools (100%) had been using the traditional 6, 7, or 8 period day before implementing block schedules.

The addition of staff is almost always a concern of school officials, no matter what type of change they are considering. Therefore, the researcher asked principals to identify if the use of block scheduling resulted in a need to increase staff. Seventy-five percent of the principals reported that their schools added staff when implementing block schedules, but all principals surveyed felt the added cost was justified.

As shown in Table 3, 52% of the respondents indicated that there was no change in the operating costs per student as a result of implementing block scheduling. Another 30% indicated that increased costs per student were \$250 or less. Several of the principals who indicated they had added staff wrote comments such as the following:

Table 3

Effects of Operating Costs Per Student of Schools Using BlockScheduling

OPERATING COSTS	NO. OF SCHOOLS	% OF SCHOOLS
No Change	29	52%
\$0-\$250	19	34%
\$251-Over \$1,000	4	7%
Amount Not Known	4	7%
Total	56	100%

- Felt the gains in student attendance, achievement, and discipline referrals were well worth the costs.

- Did increase costs but had not tried to figure.
- Guessing--did not have data.

As shown in Table 4, 46% of principals reported no change in student achievement due to the implementation of block scheduling, while 45% reported an increase in student achievement. The principals surveyed were split concerning whether student achievement increased, but several indicated that students with average and lower abilities did increase their achievement. Even though comments were unsolicited, principals wrote:

- Too early to tell.
- Many "B" and "C" students moved to "A" and "B" students.

Table 4

Student Achievement in Schools Using Block Scheduling

STUDENT ACHIEVEMENT	NO. OF SCHOOLS	% OF SCHOOLS
No Significant Change	26	46%
Significantly Increased	25	45%
No Answer	5	9%
Total	56	100%

- Slightly--depends on the class before them.
- Not thoroughly reviewed as yet.
- Hard to judge with only one year. We need an additional year for comparison.
- Cannot tell if the change is affected by block eight or simply a different student population.
- Somewhat, instead of significantly.
- Math, science, and social studies scores have been increasing. Reading and writing scores have decreased.

As revealed in Table 5, 43% of surveyed principals reported an increase in student attendance due to the implementation of block scheduling, while 48% reported no change in student attendance. The principals surveyed were split on whether attendance was affected by the move to block scheduling. Some said they already had good attendance and it continued, while others stated they did see that those students headed toward dropping out "got there much quicker."

Table 5

Student Attendance in Schools Using Block Scheduling

STUDENT ATTENDANCE	NO. OF SCHOOLS	% OF SCHOOLS
No Significant Change	27	48%
Increase	24	43%
No Answer	5	9%
Total	56	100%

As revealed in Table 6, 57% of principals reported a decrease in student discipline referrals due to the implementation of block scheduling, while 25% reported no change in student discipline referrals. Three principals reported an increase in student discipline referrals due to the implementation of block scheduling. The principals surveyed wrote comments such as:

- Decreased because of no study halls.
- Fewer passing periods during the school day.
- Teachers are implementing better lesson plans--variety of activities.
- Teachers saw students every other day.
- Students could not afford to miss class--too much covered each day.
- Teachers have worked extremely hard to design their instruction to accommodate the block eight schedule.
- Students are more active learners with the implementation of more teaching methods.

Table 6

Student Discipline Referrals in Schools Using Block Scheduling

STUDENT REFERRALS	NO. OF SCHOOLS	% OF SCHOOLS
Decrease	32	57%
No Significant Change	14	25%
No Answer	7	13%
Increase	3	5%
Total	56	100%

As reported in Table 7, 50% of surveyed principals reported no change in student failures due to the implementation of block scheduling, 29% reported a decrease in student failures, and 14% reported an increase in student failures. One comment from one of the principals surveyed stated that block scheduling was not a cure all and that those students who failed on the regular schedule would also likely fail on block scheduling.

Table 7

Student Failures Using Block Scheduling

STUDENT FAILURES	NO. OF SCHOOLS	% OF SCHOOLS
No Significant Change	28	50%
Decrease	16	29%
Increase	8	14%
No Data	4	7%
Total	56	100%

Table 8

Student Curriculum Offerings Using Block Scheduling

CURRICULUM OFFERINGS	NO. OF SCHOOLS	% OF SCHOOLS
Increase	42	75
No Significant Change	9	16
No Answer	3	5
Decrease	2	4
Total	56	100

As indicated in Table 8, 75% of the responding principals reported an increase in student curriculum offerings due to the implementation of block scheduling, 16% reported no change in student curriculum offerings, and 4% reported a decrease in student curriculum offerings. Most of the principals surveyed indicated that there was a definite increase in curriculum offerings for the students, especially in the vocational area.

As revealed in Table 9, 75% of principals reported an increase in teacher effectiveness due to the implementation of block scheduling, while 16% reported no change in teacher effectiveness; one principal reported a decrease in teacher effectiveness. It is noteworthy that three of every four principals surveyed felt that teacher effectiveness increased because of the move to block scheduling.

In order to determine if the principals would keep using block scheduling, they were asked if they would recommend it to other principals. Ninety-three percent reported they would recommend keeping block scheduling. Three principals reported no opinion

Table 9

Teacher Effectiveness Using Block Scheduling

TEACHER EFFECTIVENESS	NO. OF SCHOOLS	% OF SCHOOLS
Increase	42	75%
No Significant Change	9	16%
No Answer	4	7%
Decrease	1	2%
Total	56	100%

on recommending block scheduling, and one principal reported he/she would not recommend block scheduling. It is significant that nearly all of the principals surveyed would recommend the change to block scheduling and felt the change did help revitalize their teaching staffs. Several principals wrote comments such as:

- You will not find any of the teachers or students wanting to return to the traditional schedule.
- You did not ask, but one of the greatest advantages to the schedule (block eight) is flexibility.
- Best thing the high school has ever done for all students.
- Middle and lower level students seem to be profiting in a significant manner.
- Has been a positive influence for our school.
- We love it. We are still trying to address some problem areas such as higher level math.

- We believe teachers are better prepared and the student/teacher relationship has improved.

- Students can fit in a larger range of classes.

- Discipline way down.

- Teachers had to change approach to class and they say it caused them to update everything.

- Tougher job for a substitute teacher.

- I would strongly recommend it but faculty must be behind the change to make it positive.

- We feel we have a calmer school climate. The lunch room is more relaxed.

- Teachers are very positive toward the change.

- It is hard to say any block schedule is great. However, educational opportunities for students greatly increase.

- It is not the schedule that counts, but the individual teaching in the classroom.

- It forces many students to take courses (more) that they would not have had time for under the traditional schedule.

- It allows students two days between class for those students involved in many activities. (modified block)

- Teachers all love block eight and most students like it too.

- We have not changed to block to improve attendance, discipline, etc. The change was to provide students greater opportunity to take advantage of the rich curriculum offered.

- Staff training is essential prior to the implementation of the block schedule.
- Allows for much more individualization of student progress.
- Student achievement has gone up due to a decrease in discipline referrals.
- I feel that block scheduling is the best thing we have ever done. I would

strongly recommend it to any other school.

- Teachers here love block eight. They feel much better about material they cover.

- Block scheduling allows time to apply what is being learned--if used properly.

For us, it revitalized the vocational programs and gave us time to allow job exploration outside school.

- The block eight schedule is super! I would recommend it for any school.
- It takes three years to see change.

CHAPTER 5

Summary, Findings, Conclusions, and Recommendations

Summary

The purpose of this study was to investigate the use of the block scheduling in Illinois high schools and to identify the advantages and disadvantages of block scheduling as perceived by selected high school principals in Illinois. Specific objectives were:

1. To determine if block scheduling is more costly than the traditional schedule.
2. To determine if block scheduling is successful in accommodating increasing student achievement in Illinois high schools.
3. To determine the effectiveness of block scheduling for sustained and/or decreased student failures.
4. To determine the effects of block scheduling on curriculum offerings.
5. To determine the effects of block scheduling on teacher effectiveness.
6. To determine the effectiveness of block scheduling for sustained and/or increase in student attendance.
7. To determine the effects of block scheduling on student discipline referrals.

It was the writer's intent that the successful completion of this study would provide the necessary data for Neoga High School and officials in other schools in Illinois to make informed decisions about implementing block scheduling. Many school officials are looking for a schedule which will increase student curricular offerings and student achievement while helping to maintain discipline in their schools. Increased college requirements, increased discipline problems, and the constant search to increase student

achievement led the researcher to solicit information from principals whose schools were currently using block scheduling throughout Illinois.

Schools listed by the Illinois State Board of Education and information obtained from the 56 Illinois Regional Offices of Education through phone interviews with either the regional superintendents or someone in their offices gave the researcher the information needed to target this survey. From the information gathered from the Illinois State Board of Education and the superintendents of the Regional Offices of Education, there were 81 schools identified as using block scheduling. Fifty-six out of the 81 principals surveyed responded to the survey.

A review of the literature on block scheduling indicated efforts to restructure secondary schools often focus on changing the daily schedule to accommodate different approaches to delivering the curriculum. Block eight scheduling was first implemented at Granite School District in Salt Lake County, Utah in the mid-1970's (Ziemke, 1992). In Illinois the first four districts to implement were Seneca High School, Coal City High School, Streator-Woodland High School, and Byron High School.

A review of the literature indicated that in the last ten years, block scheduling has changed the bell schedule and teaching practices in schools across the country. According to Rettig, about one-third of the high schools in the United States are using some type of block scheduling (Jones, 1995). Rettig reported that many school employees were fascinated by the seemingly limitless possibilities and variations of block scheduling. He went on to say that teachers on a block schedule often wind up teaching more classes during the year, but most teachers see the extra classes as a fair trade-off because on the

block schedule they teach fewer students per day and usually have longer preparation periods.

Block scheduling necessitates changes in pedagogy. Teachers find it necessary to vary instructional techniques such as lecture, collaborative learning, lab experiments, and problem solving strategies. No longer can teachers lecture for an entire class period. A variety of teaching strategies should be used in the extended block of instructional time. A variety of teaching strategies results in better instruction.

Findings

The analysis of the data provided a realistic overview of the use of block scheduling in Illinois. The major findings of this study were as follows:

1. Sixty-eight percent of the schools in Illinois using block scheduling have been using it for two-four years.
2. The most widely used form of block scheduling in Illinois high schools as reported by 88% of the respondents was block eight scheduling.
3. One hundred percent of the schools surveyed had been using the traditional 6, 7, and 8 period school day before going to block scheduling.
4. Seventy-five percent of the principals reported they had to increase their number of teaching staff with the implementation of block scheduling.
5. Fifty-seven percent of the principals indicated a significant decrease in student discipline referrals with the use of block scheduling.
6. Seventy-five percent of the principals reported a significant increase in student curriculum offerings due to the implementation of block scheduling.

7. Seventy-five percent of the principals reported a significant increase in teacher effectiveness due to the implementation of block scheduling.

8. Ninety-three percent of the principals reported they would recommend keeping block scheduling as their schedule of choice.

Conclusions

Based on the results of the surveys, most principals in schools using block schedules indicated gains in attendance, reduction in failures, increased numbers of students receiving A and B grades, and fewer discipline referrals. Principals also indicated that block scheduling resulted in other positive occurrences in their schools. The teachers were rejuvenated; the students were better motivated, and overall attendance and student attitudes seemed to improve. Seventy-five percent of the principals surveyed felt that teacher effectiveness did increase because of the move to block scheduling.

It can also be concluded from the survey data that operating costs due to the implementation of block scheduling will likely increase. Thirty-four percent of principals stated the increase would be from \$0-\$250 per student.

Survey results revealed that 85% of the schools whose principals were surveyed had only been using block scheduling from one-four years. With the passage of time, more data should become available on the advantages of implementing block scheduling. Based on the data collected, however, the change to block scheduling was reported as a positive experience by 93% of the principals responding to the survey. The type of block schedule used by most of the schools (88%) surveyed was the block eight schedule.

Recommendations

If this study were to be replicated, the following changes might need to be made to the survey instrument to ensure valid responses. Questions #6 and #7 are too closely related. The question would be better stated as:

6. Did the operating cost per student change due to implementing block scheduling?

Increased Amount of Increase _____

Decreased Amount of Decrease _____

No Change

Then it would be possible to eliminate question #7. This would help streamline the survey and not confuse those answering the questions.

The following recommendations were designed to assist other schools considering adopting block scheduling in their schools.

1. School officials should make at least a three year commitment to the implementation of block scheduling.
2. Officials should investigate staff development in different teaching styles to effectively deal with the extended length of class periods.
3. School officials should determine the increased costs per student likely to be caused by the addition of staff to meet the requirements of block scheduling.
4. School officials should determine whether block scheduling will allow them to solve scheduling problems in their schools.
5. The school administrators should involve members of the staff and community in making the decision to change to block scheduling.

6. School officials should decide how students who are absent will make up the work they miss when implementing block scheduling.

References

- Canady, R. L. and Rettig, M. D. (1995). The power of innovative scheduling. Educational Leadership, 53 (3), 4-10.
- Carroll, J. M. (1990, January). The Copernican Plan: Restructuring the American high school. Phi Delta Kappan, p.p. 359-365.
- Cawelt, G. (1994). High School Restructuring: A National Study. Arlington, VA: Educational Research Service.
- Coal City High School 8-block. Unpublished, (1996).
- Donath, W. Woodand High School Description of the Block Eight Schedule. Unpublished handout, (1997).
- Edwards Jr., C. M. (1995). The 4 x 4 plan. Educational Leadership, 53 (3), 16-19.
- Gorman, B. W. (1971). Secondary Education: The High School America Needs. New York: Random House.
- Hackmann, D. G. (1995). Ten guidelines for implementing block scheduling. Educational Leadership, 53 (3), 24-27.
- Hunter, M. C. (1976). Improved Instruction. El Segundo, CA: TIP Publications.
- Jones, R. (1995). Wake up! The Executive Educator, 17 (8), 15-17.
- Keller, G. (Ed.) (1994, March). Paw Prints: A Newsletter for the Parents of Davies County High School Students. (Available from Daviess County Board of Education, P. O. Box 1510, Owensboro, KY 42302-1510).
- O'Neil, J. (1995). Finding time to learn. Educational Leadership, 53 (3), 11-15.

Report of the National Education Commission on Time and Learning. (1994).

Prisoners of Time and Learning. Washington, DC: U.S. Government Printing Office.

Schoenstein, R. (1995). The new school on the block. The Executive Educator, 17 (8), 18-21.

Seneca High School 8-block Inservice. Unpublished handout, (1994).

The 7 Block Schedule x 2. Unpublished handout, (1996).

Willis, S. (1993, March). Are longer classes better? Update, 35 (3), pp. 1, 3.

Donath, W. Woodand High School Description of the Block Eight Schedule.

Unpublished handout, (1997).

Ziemke, T. (1992). Block-8 scheduling: Worthy of more study. Illinois Principal 23 (3), 11-13.

APPENDIX A

BLOCK SCHEDULING SURVEY

A SURVEY OF ILLINOIS HIGH SCHOOL PRINCIPALS WITH SCHOOLS PARTICIPATING IN BLOCK SCHEDULING.

1. Student population of the high school?
 0 - 200 201 - 400 401 - 750 Over 750
2. How long has the school had block scheduling in place?
 Less than one year 2 - 4 years 5 - 8 years More than 8 years
3. What type of block scheduling does the high school utilize?
 4 x 4 Modified Block
 Block Eight Modular Schedule
 Other (Please identify the plan if other is checked.)

4. What type of schedule did you have prior to implementing the current block schedule?
 Traditional 6, 7, or 8 period day
 Modified Traditional Schedule
 Block Schedule (If the school had some other type of block scheduling prior to the present block schedule, please identify which one?) _____
 Other (Please identify.) _____
5. Did number of teaching staff change due to implementing block scheduling?
 No Change
 Added Staff Number added? _____
 Decreased Staff Number decreased? _____
6. Did the operating cost per student change due to implementing block scheduling?
 No Change
 Increased Amount of Increase? _____
 Decreased Amount of Decrease? _____
7. If the above question indicated an increase in per student expenditure, please identify the increased cost range?
 \$0 - \$100 \$101 - \$250 \$251 - \$500
 \$501 - \$750 \$751 - \$1,000 Over \$1,000
8. How has student achievement been affected due to implementing block scheduling?
 no significant change in student achievement
 student achievement significantly **decreased**
 student achievement significantly **increased**

9. How has student attendance been affected due to implementing block scheduling?
- no significant change in student attendance
 - student attendance significantly **decreased**
 - student attendance significantly **increased**
10. How has the number of student discipline referrals been affected due to implementing block scheduling?
- no significant change in student referrals
 - student referrals significantly **decreased**
 - student referrals significantly **increased**
11. How has student failures been affected due to implementing block scheduling?
- no significant change in student failures
 - student failures significantly **decreased**
 - student failures significantly **increased**
12. How has student curriculum offerings been affected due to implementing block scheduling?
- no significant change in student curriculum offerings
 - student curriculum offerings significantly **decreased**
 - student curriculum offerings significantly **increased**
13. In your opinion, how has block scheduling affected teacher effectiveness in the classroom?
- no significant change in teacher effectiveness
 - teacher effectiveness significantly **decreased**
 - teacher effectiveness significantly **increased**
14. How would you rate the overall value of block scheduling versus the traditional schedule?
- recommend
 - do not recommend
 - no opinion

Comments:

APPENDIX B

Cover Letter

Bruce Owen
#42 Aminoff Drive
Effingham, Illinois 62401

January 21, 1997

«Title» «FirstName» «LastName», «JobTitle»
«Company»
«Address1»
«City», «State» «PostalCode»

Dear «Title» «LastName»:

I am a graduate student at Eastern Illinois University working on a study as part of the requirements for obtaining a Specialist in Education Degree. The topic of my study is Block Scheduling in Illinois High Schools. I have randomly selected high schools in Illinois from which to obtain data for my study.

I am interested in this area because the district where I am an assistant principal is looking at the possibility of implementing block scheduling. I believe the information I obtain from this survey will help the district decide which direction to take.

I would greatly appreciate it if you would take a few minutes from your busy schedule to complete the enclosed survey and return it to me in the self-addressed stamped envelope by February 14, 1997. All responses are confidential.

Thank you for your time and cooperation for helping me with this study. If you have any questions, please feel free to contact me at (217) 895-2205.

Sincerely,

Bruce Owen
Assistant Principal
Neoga Community School District No. 3

Enclosure: 1