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Block Scheduling versus Traditional Scheduling and its Effects on Student SAT Scores

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**Block Scheduling Verses Traditional Scheduling
and Its Effects on Student
SAT Scores**

**A Research Project Presented to the Faculty of the Department of
Occupational and Technical Studies**

**In Partial Fulfillment of the Requirements for the Masters of Science in
Occupational and Technical Studies**

By

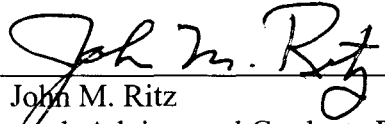
Amanda Crites

July 23, 2001

SIGNATURE PAGE

This research paper was prepared by Amanda Crites under the direction of Dr. John M. Ritz, in OTED 636, Problems in Occupational and Technical Studies. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Degree of Master of Science in Occupational and Technical Studies.

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In closing I would like to express my sincere appreciation to my husband who for the past year as been my support and guidance when I just thought I would never make it to the end.

Amanda Crites

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CHAPTER I

INTRODUCTION

Block scheduling has been an educational trend in recent years. For some educational systems, block scheduling has been a new strategy to cure other problems faced within traditional education settings. Education has taken many forms of scheduling over the centuries. With continuous educational reform it is important to understand the effects of these changes and their ramifications. Research becomes an important variable in the implementation of new scheduling options.

Traditional education for most of the twentieth century involved a six to seven period day comprised of six or seven different subjects meeting everyday for fifty minutes each day. For many decades this type of educational schedule supplied all the needed classes and allowed students to meet graduation requirements. In 1959, Lloyd Trump proposed eliminating the traditional high school schedule and instituting classes of varying lengths in accordance with the instructional needs of students (Queen, 2000, p. 1). Trump was not alone in his thinking and in later years more educational philosophers began to recognize the faults of traditional education, which was based, on tradition rather than on educational merit (Queen, 2000, p. 1). In 1983, A Nation at Risk issued a statement that reported the education of American students was seriously lagging behind other countries. Curriculum, instruction and structure were picked apart and changes began to be made. Through reform at the national and state levels, standards of learning and graduation requirements changed to reflect the demands in society. Course credits needed for graduation were increased, creating a need for more flexible scheduling. In

order for the course load demand to be met, school systems began to examine alternative scheduling patterns to accommodate the increased number of courses needed.

STATEMENT OF THE PROBLEM

The problem of this study was to determine if there was a difference in SAT scores at Bethel High School since it moved from a traditional schedule to an A/B block schedule.

HYPOTHESIS

To solve this problem the following hypothesis was developed:

H₀: There is no correlation between the implementation of block scheduling and the SAT scores of seniors at Bethel High School.

BACKGROUND AND SIGNIFICANCE

This study was developed as a result of the implementation of the AB block schedule at Bethel High School. The City of Hampton moved from traditional to block scheduling by first experimenting with it at four high schools. They tried different types of blocks at each of the schools before implementing one style citywide. Bethel for the first several years had a modified 3x3 block, which was set up like the 4x4 block. The major difference was the 3x3 block scheduled three classes to meet every other day for a full year for two hours a day. After a trial and error period of the 3x3 and the AB block, the city moved to the AB block schedule for all four schools. Presently all four high schools in the city of Hampton are on the AB block schedule.

With the implementation of the AB block schedule teachers were required to teach one additional class. In conjunction with the increased teacher workload the student workload increased from six to eight classes. In addition, a double blocked math period was required. This double blocked math was implemented with the idea it would increase student retention and increase math SOL, SAT, and other standardized test scores.

Most research supports the positive affects of block scheduling, however the City of Hampton nor Bethel High School have undertaken any research to support the decision to implement the change to block scheduling. Therefore to implement the best educational structure for Bethel High School, research on the effects of Block Scheduling needed to be studied.

Block scheduling emerged in many varieties. Amongst the most popular were the 4x4 and A/B modified block. The 4x4 allowed students to take four classes, which were for a period of ninety minutes each, meeting everyday for one semester. The 4x4 allowed for the completion of the course at the end of the semester. The A/B block extended the course for a year, with eight ninety-minute blocks, each four meeting on A day and B day according to school schedules. The 4x4 allowed for 450 hours of instructional time a semester and the A/B allowed for 270 a year. The 4x4 allowed students to earn eight credits a year and thirty-two credits in the four years of high school. The A/B schedule allowed students to earn the same amount of credits. Schedule flexibility became an important component for block scheduling success and wide acceptance.

The style of educational instruction for block scheduling was structured to vary from that of the traditional schedule. The instructor could utilize the ninety-minute period to practice alternative teaching methods, which before were not feasible due to the limited time constraints of the fifty-minute period. Less time was spent on teacher housekeeping and instructional time was increased. The variation of teaching methods enacted by instructors could include, but were not limited to, lecture, group discussions, student participation, oral presentations, games, learning activities, and projects. Project-based learning became an invaluable instructional tool for education and block scheduling allowed time for implementation.

Block scheduling allowed for expanded student choice in their educational plan. Many students found the flexibility of block scheduling allowed them to take courses they had never before had time to take. For some students these added classes could pose important future career and educational decisions. However, students who have earned requirements for graduation will be able to leave school early. This is not the intention of block scheduling and it must be understood that this is a school-based decision, not something that all school systems allow.

This study examined the effects of block scheduling on the academic success of the student. With all of the scheduling benefits created from the move from traditional scheduling to block scheduling, it became important to examine the academic assets in conjunction with the obvious flexibility. The significance is to show any existing relationship between block scheduling and SAT scores, as a way to justify its implementation at Bethel High School.

One way to follow up on the effectiveness of block scheduling was to examine the average SAT scores of seniors at Bethel High School before and after block scheduling was implemented. Since no study had been done to examine any aspects related to the positive outcomes of block scheduling, SAT scores could provide a good indication of the advantages of using a block schedule. As juniors in high school, the SAT scores are taken as part of the college entrance process. The SAT scores reflect a student's aptitude towards two areas, verbal and math abilities. In 1998 Donald Hackman and David Waters discovered students attendance increased, enrollment in Advanced Placement courses increased, course grades improved, parallel with the switch from traditional to block scheduling (Queen, 2000, p. 3). These factors, attendance, Advanced Placement courses, and grades, are good indicators of student SAT scores.

Bethel continues to implement block scheduling with no concrete evidence that it has positive lasting effects on student achievement. Examining the SAT scores of Bethel High students will provide data on positive or null effects of moving to a block schedule.

LIMITATIONS

The limitations set certain boundaries. The group used to collect data was Bethel High School seniors. The age range was limited to seniors between the ages of 16 and 18. The collection of data was done through the guidance department at Bethel High School. The data were collected from the years 1995 and 2000 because of the timing of the implementation of the block scheduling. SAT scores were used as the factor determining student academic success in this study.

Another limitation was the score differential of 120 points implemented by the Scholastic Aptitude testing board. The 120 points were added to the math and verbal scores. This made a difference because the differential was implemented after 1995. This means that increases of 120 points have to be attributed to this change. As a result the scores compared in 2000 reflect a 120-point increase from 1995. Therefore to show any positive change the point increase must be greater than 120 points. The results of the experiment considered the 120-point difference.

The implementation of the SOL testing after 1995 was also a factor. SOL increased test preparation and course standards. Students take SOL prepared tests and practice tests throughout the year. The increased emphasis on test preparation could be a factor in increased SAT scores.

ASSUMPTIONS

The slightest increase in SAT scores for twelfth graders after the switch from traditional to block scheduling must be attributed to the increased instructional time from 50 to 90 minutes. The study covered data from Bethel High School's move from traditional to AB block scheduling. The data collected reflects two schedule types. The data will be limited to the years of the traditional (1995) and AB (2000) schedules.

Research assumes that block scheduling increases student retention, achievement, and understanding. Providing longer class periods within which to learn the information increases student retention. Student achievement was reflected in this study as SAT scores. Other measurements of student achievement are grade point average and SOL scores.

PROCEDURES

The procedures for the progression of the study commenced with the compilation of twelfth grade SAT scores during the 1995 school year prior to the change from traditional to block scheduling. The data will be collected in 1995 and 2000, due to the limitation of the available data for the year 2001.

The data collected represents all seniors who took the SAT exams in 1995 and 2000. The control group's scores were examined in the traditional schedule setting in 1995 only. The average scores from each year were examined and compared relative to the type of scheduling implemented at the time.

DEFINITIONS OF TERMS

Throughout the study terms were referenced that are defined to allow for better understanding.

AB Block scheduling- ninety-minute blocks, which meet every other day for a full year.

Bethel High School- high school in the city of Hampton, also referred to as BHS.

Block Scheduling- structures courses for extended time, such as ninety-minutes instead of fifty-minutes.

Block- abbreviation for block scheduling.

BS- block scheduling.

Electives- courses outside of the core courses.

Four by Four Block- also 4x4. They are ninety-minute blocks, which meet everyday for one semester.

Three by Three Modified Block- also 3x3, one hundred and twenty minute blocks which meet every other day for a year.

SAT- Scholastic Aptitude Test given to juniors and seniors for post-secondary acceptance.

SAT Scores- possible score of 800 verbal and 800 math to equal 1600 total.

OVERVIEW OF CHAPTERS

This study was planned to determine the effectiveness of block scheduling in relation to the outcome of senior SAT scores at Bethel High School. Bethel High School was chosen because no prior study of this nature had been done to link the theories of block scheduling to overall student success and student achievement. With the concentration of math and verbal components, the SAT scores pose an accurate reflection of the effectiveness of block scheduling when compared to scores prior to block scheduling. The experiment was developed to determine the influential or non-influential factors of block scheduling on student performance. Scores were collected and analyzed from the years 1995 and 2000 to expand from the traditional six or seven period days to the AB block schedule.

In the following chapters the data were presented and analyzed. The Review of Literature chapter provides background information and supporting data from other researchers on the topic. The school personnel and guidance department was also used and interviewed to obtain accurate information relevant to Bethel High School. The hypothesis was that block scheduling has no effect on the SAT scores of seniors at Bethel High School.

CHAPTER II

REVIEW OF LITERATURE

Block scheduling has been the answer to many schools systems struggle against low-test scores, increased teacher liability, school accreditation requirements, and dropout rates. In some research studies it was found that block scheduling increased test scores and lowered student dropout rates. However, some research found the exact opposite. In between these two extremes schools have found positive and negative effects of block scheduling and of traditional scheduling. The sub-sections of Chapter II are Description of Block Scheduling, Limitations of Block Scheduling, Assets of Block Scheduling, SAT Scores, and Curriculum in Hampton City Schools.

DESCRIPTION OF BLOCK SCHEDULING

There are several different types of block scheduling. The 4x4 block method is the most frequently used. This method scheduled four ninety-minute classes per semester. The *Copernican Plan Evaluated: Restructuring the American High School* was the primary model from which block scheduling was derived (Mell, 2001, p. 1). There are controversial views of block scheduling and the effect it has on student achievement.

One key point found in several studies, according to Mell and Stokes, was the importance of proper implementation of block scheduling. Most importantly, teachers need to use effective instructional methods and utilize the extended time period. Effective teaching skills for block scheduling include: using pacing guides, effective use of instructional strategies, flexibility and creativity in class environment, effective classroom management, and sharing learning with students (Queen, 2000, p. 9).

LIMITATIONS OF BLOCK SCHEDULING

Block scheduling has been found, in some cases, to decrease student achievement. If the block period is not properly implemented, student learning may suffer. Many complaints have been the loss of instructional time and teacher misuse of instructional time. Block scheduling has been attacked because it reduces total instructional time per class, but housekeeping is cut in half (Queen, 2000, p. 5). Reports from parents and teachers in several school districts suggest that block scheduling dilutes education (Lindsay, 2000, p. 2). A study done in 1992, at Parkland High School in North Carolina, compared a six period day to a 4x4 block and overall SAT scores dropped the first year of implementation and did not improve to the level they were before the change (Mell, 2001, p. 1). In a shorter class time less material is covered and some say, "less is more", but others say that it cheats the students of a true education.

ASSETS OF BLOCK SCHEDULING

On the positive side of the argument for block scheduling, high schools can implement a semesterized block schedule with no overall decline in student achievement (Lindsay, 2000, p. 1). A study done at Philo High School in Ohio reported immediate positive effects of block scheduling on grade point averages, especially with ninth graders (Wilson, 1999, p. 4). Instead of a decline in student achievement at the Ohio school, students reflected a positive effect of block scheduling.

With any form of education, especially public education, there is always going to be two or three sides to every educational problem or solution. Since block scheduling came as an alternative for the educational system in the United States, it is

important to look at all sides. Research is available about test after test and study after study that has been done in recent years. From the research the researcher has found there are no studies that provide conclusive information.

SAT SCORES

The Scholastic Aptitude Test is taken at the junior and senior level. The SAT is scored in two sections, verbal and math. Each section has a point value of 800, totaling 1600. A score of 1600 is perfect. Scores are ranked nationally and colleges and universities have standards set for scores, which are used as admission criteria.

SAT scores are often used by school systems to measure overall student achievement. Within the City of Hampton, all four high schools are compared based on SAT scores. Bethel has had the lowest scores for the past seven years. The average score for Bethel High School is 440 verbal and 450 math, which total is approximately 100 points below the other three high schools.

With the implementation of the Virginia Standard of Learning test, scores have not increased. SOL classes were required to implement new teaching strategies and follow Standard of Learning guidelines. This has not had an effect on the SAT scores at Bethel High School.

Studies have been done in other school systems, which have reported several different findings. An unknown high school in Pennsylvania did a study over a five-year span, which included two years before block scheduling and three years after implementation of block scheduling. They found little difference in student scores on the

PSAT. However, on the SAT they found math decreased by 4 points, and verbal increased by 12 points (Queen, 2000, p. 7).

Another study done at Hatsboro-Horsham Senior High School, in Horsham, Pennsylvania, reported declines in the verbal and math sections of the PSAT after initial implementation of block scheduling (Wilson, 1999, p. 3). However, in the years that followed, scores became higher with block scheduling (Wilson, 1999, p. 3). This study at Hatsboro-Horsham Senior High School shows the possibility of a slight decline in scores during a period of transition and then a recovery of scores after the transitional period is over. The transitional period may have had lower scores because of the adjustment that had to be made by teachers and students.

CURRICULUM IN HAMPTON CITY SCHOOLS

The City of Hampton has implemented block scheduling in all four high schools. Curriculum for each subject has been rewritten to fit the guidelines of the Virginia SOL's and the requirements of a ninety-minute class period. Hampton has also implemented a SAT prep course to help students prepare for the SAT exam. Teachers and administrators have worked together to provide student tutoring in SOL areas and SAT preparation.

SUMMARY

There are many research studies with contradicting findings. Block scheduling remains controversial and the effectiveness of it remains a mystery. This chapter analyzed findings from other studies. Education is a timeless process and

obviously the merits of block scheduling remain inconclusive. The following chapter will discuss and explain the methods and procedures for data collections.

CHAPTER III

METHODS AND PROCEDURES

This study was done using experimental research methods to compare two groups of SAT scores to see if the type of scheduling had any affect of the scores. The steps taken to gather and analyze the data are discussed in this chapter. The subjects used were Bethel High School seniors who had taken the SAT exam in 1995 and 2000. Confidentiality was important to conceal and protect the students. The topics discussed in this chapter are Population, Research Variables, Instrument Design, Methods of Data Collection, and Statistical Analysis.

POPULATION

The population of the sample was Bethel High School seniors during the school years 1995-1996 and 1999-2000. These seniors took the SAT exam an average of 2.5 times. During the 1995-1996 school year there were 417 total enrolled seniors and 220 of them took the SAT exam. The average GPA of these seniors was a 2.8. In 1999-2000 there were 422 seniors enrolled and 225 of them took the SAT exam. The average GPA of the seniors in 1999-2000 was between 2.5 and 2.6. The student population was approximately 50/50, black/white ratio. The students were from middle to upper middle incomes families, mainly military. The student population at Bethel High School was transient because of Langley Air Force Base. The seniors at Bethel earn the highest amount of money in scholarships of all four Hampton schools. Last year the amount

totaled over 2 million dollars. About 60% of the senior class is college bound. The sample used in the study only represents those seniors that took the SAT exam.

RESEARCH VARIABLES

The SAT test has four different versions that are administered at different times throughout the year. Therefore the version in 1995 might have been different than the version taken in 2000. The control group was the traditional block, which were seniors from 1995-1996. The experimental group was the block-scheduling group, which were seniors from 1999-2000. The independent variable was the traditional and AB block schedules and the dependent variable was the average SAT score.

INSTRUMENT DESIGN

The SAT or the Scholastic Aptitude Test is divided into math and verbal sections. The verbal section has subsections on word definitions, analogies, antonyms, and reading comprehension. The math section is composed of algebra, geometry, and pre-calculus. The scoring of each section equals 800 verbal and 800 math, and a combined perfect score would be 1600. The test is given at the local high schools and students sit for three hours of testing. The test is designed to measure student aptitude and is used for college acceptance nationwide. The SAT is used extensively and has established over many years reliability and validity, through the SAT Board. The scores from 1995-1996 were corrected with 120 points to compensate for the point difference implemented by the SAT Board between the years of 1995 and 2001.

METHODS OF DATA COLLECTION

The data were collected from the guidance department at Bethel High School for the years of 1995-1996 and 1999-2000 of all seniors who took the exam. The test compilation sheets sent to the school from the SAT Board were copied and examined to report the highest score for each student. The students' names were replaced with numbers to protect confidentiality.

STATISTICAL ANALYSIS

The t-test was used to determine if there was a significant difference between the means of the two samples. The means were calculated using the mean of the year of traditional scores and the mean of the year of block scheduling scores. The test compared the experimental group (block scheduling) with the control group (traditional scheduling).

SUMMARY

All of the data were collected at Bethel through the guidance department. Each student's scores were reviewed to find the best score for each student. Then the scores were analyzed using the t-test of significance. The t-test was used to show if there was any significant difference in the scores from 1995-1996 (traditional scheduling) to 1999-2000 (block scheduling). In the following chapter, the data were analyzed and findings were reported.

CHAPTER IV

FINDINGS

This study was undertaken as an experiment to see if the type of scheduling affected student SAT scores. The types of scheduling were traditional seven periods and A/B block. The problem of the study was to determine if there was a difference in SAT scores at Bethel High School since it moved from a traditional schedule to an A/B block schedule. The sub-sections of Chapter IV are schedule comparisons, results, and, summary.

SCHEDULE COMPARISONS

The data collected reported individual SAT scores for each senior that took the SAT their senior year in high school. The data reflects some students who took the exam up to seven times in one year. The best score for each student was used to calculate the data. The average for each school year was calculated and used to calculate the t-ratio.

Table 1 shows the total SAT score for the two years of data.

Table 1

Comparison of SAT Scores from 1995-96 and 2000-01

Year	Total Combined Score
SAT scores 1995-1996	1110
SAT scores 2000-2001	890

The average scores for 1995-96 were 1110 and the average scores for the 2000-02 were 890. The scores from 1995-1996 were 220 points higher than the scores from 2000-2001. The 120-point difference in the two years of tests has already been added into the year 1995-1996 to compensate for the difference in scoring. Therefore the original average was 990, but the 120 points were added to each SAT score calculated to equal the 1110 average score.

RESULTS

The t-test results showed that t equaled 9.5, which exceeded the level of .05 at $p > 1.960$ and the .01 level at $p > 2.576$. The degree of freedom was 443.

SUMMARY

In summary, the findings reported a 220-point difference in the mean of the two sets of scores. The traditional scheduling year from 1995-1996 had an average SAT average of 1110 and the A/B block-scheduling year from 2000-2001 had an average SAT score of 890. In Chapter V, the findings will be given and conclusions will be made based on the acceptance of the null hypothesis and recommendations will be made for future study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Block scheduling has been the answer to many school systems problems in education. The switch from traditional scheduling has taken place over the past several years. This chapter will summarize the research study. It will draw conclusions based upon the hypothesis and will discuss recommendations for future studies.

SUMMARY

The purpose of this study was to determine if the switch to block scheduling made a difference in the SAT scores of seniors at Bethel High School. Since Bethel implemented block scheduling there has not been any research done to determine its effects.

The problem of the study was to determine if there was a difference in SAT scores at Bethel High School since it moved from a traditional schedule to an A/B block schedule. The hypothesis was:

H_0 : There is no correlation between the implementation of block scheduling and the SAT scores of seniors at Bethel High School.

This study examined the effects of block scheduling on the academic success of the student. With all of the scheduling benefits created from the move from traditional scheduling to block scheduling, it became important to examine the academic assets in conjunction with the obvious flexibility. The significance was to show any existing

relationship between block scheduling and SAT scores, as a way to justify its implementation at Bethel High School.

One way to follow-up on the effectiveness of block scheduling was to examine the average SAT scores of seniors at Bethel High School before and after block scheduling was implemented. Since no study had been done to examine any aspects related to the positive outcomes of block scheduling, SAT scores could provide a good indication of the advantages of using a block schedule. As juniors in high school, the SAT scores are taken as part of the college entrance process. The SAT scores reflect a student's aptitude towards two areas, verbal and math abilities. In 1998 Donald Hackman and David Waters discovered students attendance increased, enrollment in Advanced Placement courses increased, course grades improved, parallel with the switch from traditional to block scheduling (Queen, 2000, p. 3). These factors, attendance, Advanced Placement courses, and grades, are good indicators of student SAT scores.

Bethel continues to implement block scheduling with no concrete evidence that it has positive lasting effects on student achievement. Examining the SAT scores of Bethel High students will provide data on positive or null effects of moving to a block schedule.

The limitations set certain boundaries. The group used to collect data was Bethel High School seniors. The age range was limited to seniors between the ages of 16 and 18. The collection of data was done through the guidance department at Bethel High School. The data were collected from the years 1995 and 2000 because of the timing of the implementation of the block scheduling. SAT scores were used as the factor for determining student academic success in this study.

Another limitation was the score differential of 120 points implemented by the Scholastic Aptitude Testing Board. The 120 points were added to the math and verbal scores. This made a difference because the differential was implemented after 1995. This means that increases of 120 points have to be attributed to this change. As a result the scores compared in 2000 reflect a 120-point increase from 1995. Therefore to show any positive change the point increase must be greater than 120 points. The results of the experiment considered the 120-point difference.

The implementation of the SOL testing after 1995 was also a factor. The SOL's increased test preparation and course standards. Students take SOL prepared tests and practice tests throughout the year. The increased emphasis on test preparation could be a factor in increased SAT scores.

The population of the sample was Bethel High School seniors during the school years 1995-1996 and 1999-2000. These seniors took the SAT exam an average of 2.5 times. During the 1995-1996 school year there were 417 total enrolled seniors and 220 of them took the SAT exam. The average GPA of these seniors was a 2.8. In 1999-2000 there were 422 seniors enrolled and 225 of them took the SAT exam. The average GPA of the seniors in 1999-2000 was between 2.5 and 2.6. The student population was approximately 50/50, black/white ratio. The students were from middle to upper middle incomes families, mainly military. The student population at Bethel High School was transient because of Langley Air Force Base. The seniors at Bethel earned the highest amount of money in scholarships out of all four Hampton schools. Last year the amount totaled over 2 million dollars. About 60% of the senior class is college bound. The sample used in the study only represents those seniors that took the SAT exam.

The SAT or the Scholastic Aptitude Test is divided into math and verbal sections. The verbal section has subsections on word definitions, analogies, antonyms, and reading comprehension. The math section is composed of algebra, geometry, and pre-calculus. The scoring of each section equals 800 verbal and 800 math, and a combined perfect score would be 1600. The test is given at the local high schools and students sit for three hours of testing. The test is designed to measure student aptitude and is used for college acceptance nationwide. The SAT is used extensively and has established reliability and validity, over many years through the SAT board. The scores from 1995-1996 were adjusted with 120 points to compensate for the point difference implemented by the SAT board between the years of 1995 and 2001.

The data were collected from the guidance department at Bethel High School for the years of 1995-1996 and 1999-2000 for all seniors who took the exam. The test compilation sheets sent to the school from the SAT board were copied and analyzed to report the highest score for each student. The students' names were replaced with numbers to protect confidentiality.

The t-test was used to determine if there was a significant difference between the means of the two samples. The means were figured using the scores for each student from the year of traditional schedule scores and the scores of each student from the year of block scheduling scores. The test compared the experimental group (block scheduling) with the control group (traditional scheduling).

CONCLUSIONS

The hypothesis for this study was:

H_0 : There is no correlation between the implementation of block scheduling and the SAT scores of seniors at Bethel High School.

The hypothesis, which stated there was no difference between the SAT scores of seniors at Bethel High School from traditional scheduling and block scheduling, was rejected with the t-test score of 9.5 at the .01 at $p > 2.576$ significance level. There was a significant difference in the SAT scores from the years of traditional and block scheduling. Therefore we may conclude that scheduling had a significant effect on student SAT scores at Bethel High School. In addition, we can conclude that students who were in the traditional schedule scored significantly higher than those who were in block schedules. The results of the study reflect the change in scheduling to a block schedule related to the decline in SAT scores for seniors at Bethel High School.

RECOMMENDATIONS

Hampton City Schools implemented block scheduling as a means of improving education, however there was never any research done to test the implications on student achievement. Based on these research findings, additional research should be undertaken to analyze the effects of different types of scheduling on student achievement. From the years 1995 and 2001 there has been a significant change in testing outcomes.

Block scheduling has been researched as the answer to suffering school systems. However, student achievement is not concrete and should be researched on an individual school system basis. Bethel, as well as the other Hampton City Schools, should be studied to determine the impact of block scheduling and the effects of changing from traditional scheduling. The research conducted assumes the extraneous conditions were

the same for each of the years studied, therefore more research and other schools data could help validate the results found.

The researcher recommends:

1. A more thorough investigation into the effects of SOL implementation on student achievement and a comparison of how the SOL's are implemented and achieved using the block schedule and the traditional schedule.
2. Investigation of the effects of the overcrowding and the early dismissal of students in their junior and senior years, which are the typical SAT testing years, to determine the effects on SAT scores.
3. A more in-depth look into who is taking the SAT tests compared from 1995 to 2001. It is possible a more diverse group of students are or were taking the exam, which could affect the score average.
4. Based on the results of this study more investigation needs to be done covering the scope of all different types of scheduling and the effects they have on SAT scores of high school students.
5. Finally conduct a study all the Hampton City Schools to see if any increases in SAT scores have occurred since the implementation of block scheduling.

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