A study of the feasibility of block scheduling at Buena Regional High School

Bruce R. Arcurio  
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A Study of the Feasibility of Block Scheduling at Buena Regional High School

By
Bruce R. Arcurio

A Masters Thesis
Submitted in partial fulfillment for the requirements of the Master of Arts Degree in The Graduate School of Rowan University
May, 1998

Approved by
Professor

Date Approved
May, 1998
Abstract

Bruce R. Arcurio

A Study of the Feasibility of Block
Block Scheduling at Buena Regional
High School
1998
Dr. Ronald Capasso
School Administration

The focus of this study has been to determine the feasibility of implementing
some form of block scheduling at Buena Regional High School. Due to the small scope
of the project the entire population of professionals who would be responsible for the
implementation of a block schedule was used. The data collection instruments utilized
were a questionnaire and various forms of interviews. Data analysis consisted of
calculating percentages for quantitative questions on the questionnaire and an analysis of
trends for the qualitative questions and interviews. The research indicates that it is
unlikely that a block schedule can be created that the union and the administration of the
high school would agree upon. Several variations of block schedules are suggested as
strong possibilities, but none meets the needs of both groups.
Mini-Abstract

Bruce R. Arcurio

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1998
Dr. Ronald Capasso
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The focus of this study has been to determine the feasibility of implementing some form of block scheduling at Buena Regional High School. The research indicates that it is unlikely that a block schedule can be created that the union and the administration of the high school would agree upon.
Acknowledgment

This feasibility study of block scheduling at Buena Regional High School was completed as a requirement of the Masters Degree program in School Administration at Rowan University in Glassboro, New Jersey. This study could not have been possible without the support of Susan Exler, vice-principal of Buena Regional High School or the staff of the high school who participated in the research.

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Chapter 1
Introduction: Focus of the Study

Statement of the Problem

Currently Buena Regional High School works with a traditional scheduling format. There are nine forty-minute periods each day with three minutes passing time in between each period. A student's course-load can vary between five and eight classes for the year. This translates into five to eight teachers each day; five to eight different subjects to learn each day; five to eight starting and stopping points each day; twenty-seven minutes of passing time each day; and five to eight homework assignments to complete each night. In addition, teachers carry a teaching load of five to six classes each year. This means 120-200 students; 120-200 papers to grade regularly; five to six teaching starts and stops; two duties; forty minutes of preparation time; and three to six course preparations each day.

Currently, the traditional scheduling system at Buena aids in creating a negative climate because teachers feel the added pressure of their inability to complete lessons and projects, due to time constraints. Also, in a society where students have reduced out-of-school-time due to extra-curricular activities, jobs, and family obligations, it is difficult for students keep up with the demands placed on them by a traditional schedule. Thus,
students feel overwhelmed and teachers feel ineffective. These factors, in addition to many others, cause a great deal of stress on both teachers and students, which consequently, has a negative effect on school climate.

The research done in the area of alternative scheduling at Buena Regional High School has three main goals. First, in terms of leadership development, the intern will apply effective strategies for assessing various forms of alternative scheduling and the feasibility of implementing a change in school programs. This entails comprehensive research of the environment into which a new scheduling system will be implemented; extensive research of the various forms of alternative schedules in order to find one that is an effective alternative for Buena Regional High School; and, finally, a feasibility study of uniting the setting with the schedule. Second, the Buena Regional High School administration will be provided with knowledge of the feasibility of implementing block scheduling, in order to make decisions pertaining to organizational change that will enhance instruction. This will present the organization with a viable alternative to the shortcomings of the current system. Third, the Board of Education, the administration, and the high school staff of Buena will enhance instruction as a result of choosing some form of alternative scheduling for Buena Regional High School.

Definitions

The following is a list of terms and their meanings in the context of this study.

**Alternative Schedule:** Any scheduling system that differs from the traditional 40-50 minute period, seven to nine period day, full year class schedule, used by Buena Regional High School at the time of the study.

**4x4 Block Schedule:** "Students enroll in four 90-minute courses that meet every day for 90 days. Teachers teach three courses each semester. Year-long courses are completed in one semester. Students enroll in four new courses in the second semester." (Winans 1997)
A/B or 8 Block Schedule: "Each Semester, students take eight 90 minute classes, but classes meet every other day-- four on Day A and four on Day B." (Winans 1997)

Block Schedule and Extended Periods: "A mix of block scheduling-- for part of the week-- with more traditional scheduling." (Winans 1997)

Copernican Plan: "Four 10-week semesters enable students to undertake intensive study in two subject areas for 2.5 hours each day in each class. At the end of the semester, students move on to two new courses." (Winans 1997)

75-15, 75-15 Block Schedule: "Students take four classes for a 75-day fall term, followed by a 15-day intersession for enrichment activities or remedial work. The cycle repeats in spring." (Winans 1997)

Block: A class period. In this study usually longer than 40 or 50 minutes.

B.R.I.T.E. workshops: (Buena Regional Instructional Techniques Enrichment) Buena Regional School District's in house professional development program consisting of 1-3 day workshops focusing on a variety of topics to enhance teacher performance in the classroom for the purpose of increasing student performance. Teachers may take one of these workshops each school year.

Hybrid: A variation on 4x4 block, The Copernican Plan, or A-B Block.

Traditional Schedule: Any schedule that follows the standard 40-50 minute period, 7-9 period day, and full year course system.

Limitations of the Study

This study of alternative scheduling possibilities at Buena Regional High School is structured for use only in that setting. While the findings may be of interest to other schools who wish to investigate an alternative to their own scheduling system, they should not be interpreted as data that will generalize to other districts or even other schools within the Buena Regional School District. The purpose of the study is to benefit Buena Regional High School and should be viewed from that perspective. The study also limits itself to the area of scheduling and time management; the ease or difficulty with
which a change to an alternative schedule is made should not be generalized to other systemic changes.

An intervening variable to be considered is the adversarial nature of this issue with regard to the union and the administration. The association mistrusts the motives of the board, in that most alternative schedules require increased teaching time and the possibility of staff reduction. This is a difficult hurdle to overcome because in New Jersey, school boards cannot contractually assure unions that staff reduction will not occur. Of relevance are the recent contract negotiations that took almost a year to complete due to some major points of contention, one of which was a block scheduling plan that the administration wanted to implement. This illustrates the negativity that the issue of alternative schedules has evoked in the past. This negativity must be overcome, if there is any hope for change.

Another important consideration is the financial situation with which the district is now faced. Currently, there is a bond referendum pending to put a new roof on the building, to create two additional science labs, and to put an elevator in for the handicapped. These pressing financial issues create a sense of skepticism about any new program that may cost the district extra money. Since alternative scheduling may incur additional expenses, such as technology, manipulatives, para-professionals, and staff development, this is another issue that must be considered.

Setting of the Study

The Buena Regional High School is located in Atlantic County, approximately midway between Atlantic City and Philadelphia, on a rural 84-acre site. The school was constructed in 1973 and serves students in grades 9-12. The High School serves Buena
Boro which includes Landisville and Minotola; Buena Vista Township which includes the towns of Newtonville, Collings Lakes, Richland, East Vineland, and Milmay; and the sending districts of Weymouth, Estell Manor, and Newfield.

The community is rural, but business and industry are permeating the area as time progresses. Demographic data is necessary to illustrate the nature of the region. For analytical purposes, only data from the 1990 U.S. Census for Buena and Buena Vista Township is compiled. These figures may be found in Table 1-1.

<table>
<thead>
<tr>
<th>Demographic Topics</th>
<th>1990 US Census Data Fields</th>
<th>Buena Vista Township</th>
<th>Buena Borough</th>
</tr>
</thead>
<tbody>
<tr>
<td>population</td>
<td>number of residents</td>
<td>7655</td>
<td>4441</td>
</tr>
<tr>
<td>ethnic makeup</td>
<td>white</td>
<td>6068</td>
<td>3609</td>
</tr>
<tr>
<td></td>
<td>black</td>
<td>1236</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Native American/Eskimo/Aleut</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Pacific Islander/Asian</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>316</td>
<td>581</td>
</tr>
<tr>
<td></td>
<td>non-specified/other</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>median income</td>
<td>household</td>
<td>$28,294.00</td>
<td>$27,577.00</td>
</tr>
<tr>
<td></td>
<td>per capital</td>
<td>$12,614.00</td>
<td>$11,923.00</td>
</tr>
<tr>
<td>housing units</td>
<td>number of housing units</td>
<td>2945</td>
<td>1636</td>
</tr>
<tr>
<td></td>
<td>median value</td>
<td>$81,000.00</td>
<td>$79,200.00</td>
</tr>
<tr>
<td>school</td>
<td>private attendees</td>
<td>284</td>
<td>218</td>
</tr>
<tr>
<td></td>
<td>public attendees</td>
<td>1519</td>
<td>855</td>
</tr>
<tr>
<td>class of workers</td>
<td>private, for-profit</td>
<td>2501</td>
<td>1406</td>
</tr>
<tr>
<td>(employed persons</td>
<td>private, non-profit</td>
<td>82</td>
<td>81</td>
</tr>
<tr>
<td>16 years or older)</td>
<td>government</td>
<td>499</td>
<td>307</td>
</tr>
<tr>
<td></td>
<td>self-employed</td>
<td>258</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>unpaid family work</td>
<td>40</td>
<td>28</td>
</tr>
</tbody>
</table>

This chart provides a depiction of the community financially and ethnically. The figures demonstrate the low socio-economic make-up of the population. This statistic works against the school system because most citizens of the town earn salaries less than the professionals in the schools, causing animosity toward education. The area is not densely populated partially due to the farms and forests that take up a large amount of
land. Overall, the cultural mix of the area provides diversity that many communities lack.

Buena is one of the poorest districts in the state; unfortunately, due to its rural status it has never qualified as one of the states thirty special needs districts. In the 1995-1996 school year, 28% of the district's revenues came from local taxes, 54% came from the state, 2% came from the federal government, and 16% came from other sources. The allocation of this money results in a total of a $6,630 expenditure per student as compared to the 1995-96 state average of $7,759 (NJ School Report Card). The general population of the school district would be described as "blue collar" and is both racially and ethnically diverse. The school reflects this with the demographic breakdown shown in Table 1-2.

Table 1-2.

<table>
<thead>
<tr>
<th>Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>Black</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>

The district services a Kindergarten through grade 12 population; furthermore there are several private and parochial schools that also draw from this population. The various elementary and middle schools provide students with a solid base for the performance that is expected at the high school level. The high school, "offers a comprehensive educational program to a culturally ethnically diverse student population." (NJ School Report Card) The High School offerings include advanced
placement courses in American History, English, Calculus, and World History, as well as, traditional course offerings in each of the major areas. Lab sciences include Physics, Biology, and Chemistry. An effective Agriscience/Horticulture program, an art and music (instrumental and choral) program, as well as a comprehensive business/technology department highlight the elective program. The vocal music program is nationally recognized. The school provides an extensive student activities program, including all major athletic areas and many clubs, organizations, and committees, ranging from the Key Club and the Bible Club to the Future Teachers of America and the Newspaper Staff. Both community and parent involvement are encouraged through "Back to School Night", site based team meetings, parent conferences, and the many student related activities and events.

In 1995-1996 the average class size in the high school was 25 students. The ratio of students to faculty was 13.9 to 1. The mobility rate of the school was 16%. The student attendance rate was 93.0%. The length of the school day was 6 hours : 45 minutes and the amount of instructional time per day was 5 hours : 7 minutes. Historically, Buena Regional High School has scored above state averages on the High School Proficiency Test; however, scores on the SAT tend to reflect lower averages because all students are encouraged to attempt the test. (NJ School Report Card)

An addition to the high school over the last two years has been the acquisition of a computer lab with twenty-four Pentium computers and Internet capabilities. This has provided students with myriad word processing and information gathering opportunities. There is a current of excitement among teachers and students regarding this development. Another technological addition to the high school is the distance learning classroom; this
room contains a system that allows students and teachers to interact with people in other places. It is currently being used for a distance-learning AP course, but will be expanded in the future to provide teacher in-service, video-conferencing, additional courses for students, and possible graduate level courses for the staff.

The High School building consists of two floors. It is a clean and fairly well maintained building; however, it is in need of a new roof, an elevator, and several new classrooms, for which there is a bond referendum pending in the November, 1997 elections. The building was designed to serve approximately 900 students; the 1997-1998 enrollment is near 940 students. This makes the bond referendum for the two classrooms extremely important, and also illustrates a trend of increasing population in the area that must be accommodated both now and in the future.

Importance of the Study

Alternative scheduling is a topic which has become popular in the nineties due to factors such as increasing enrollment, decreased funding, poor school climate, frustration with traditional time constraints, and research in how students learn. It is easy to mention these problems, but each must be analyzed to determine the true need for a change. First, increasing enrollment is a problem almost everywhere; schools, such as Buena Regional High School, not only have difficulty finding space for all of the students, they must also find ways to afford more teachers to teach them. With some forms of block scheduling the number of course sections can be increased to accommodate such an influx of students. As a result, teachers are capable of teaching more students during an academic year, while actually having fewer students at any one time. This restructuring of both the
school day and school year could enable Buena's administrators to be creative with the class schedule and to provide for the enrollment needs of the school.

Second, decreased funding from the state and the growing trend of defeated budgets has left many schools scrambling to cut programs. Alternative scheduling does not claim to cut the expenses that Buena may incur, but it does provide an alternative, not costing much beyond staff development, in the beginning. Shortt and Thayer (1995) suggest that districts ask themselves the question, “Although the initial year of implementation may not appear to require additional funding, will this be an issue in coming years when there are requests from more students for additional electives?” Fiscal worries tend to come from the desire to provide more programs, not from existing ones. Some existing budget areas will actually decrease; for example, expenses such as textbooks and lab materials are cut in half because only half of the students take any one course at a time.

Third, school climate can also be improved through the institution of an alternative schedule. According to Buckman, Besten-King, & Ryan (1995), “Teachers reported that they liked having more time to give students individual assistance; opportunities to get to know the students personally; time for more creative and meaningful student work; and the ability to structure a full lesson, to introduce a topic or concept, discuss it, and bring it to closure.” Fourth, teachers are often frustrated with the fact that class periods only last forty minutes. Alternative scheduling provides a unit of time that allows for the learning activities that research has shown to be most effective.

Finally, alternative scheduling provides effective models to incorporate the techniques borne out of the research on how students learn. “Research has demonstrated
that lecturing is the least effective form of instruction that teachers can use, but lecturing is common in U.S. secondary classrooms [including those at Buena Regional High School]. More lecturing will not enhance student performance, but will lower teacher effectiveness and student enthusiasm.” (Huff 1995). Models that require active participation on the part of the students are what the research suggests to be most effective in schools. Cooperative learning strategies (when implemented correctly) provide opportunities for active learning where all members of the class are engaged in the process. A focus on Gardener’s Multiple Intelligences is more feasible in a blocked period because it allows time for the inclusion of a variety of teaching methods to be utilized in one lesson. Although these techniques are taught in Buena's B.R.I.T.E. program, implementation is difficult due to the time constraints of the traditional schedule.

The main reason that alternative scheduling should be considered at Buena is to, “provide larger blocks of time to ensure that all essential materials are covered. According to teachers from Wasson High School in Colorado Springs, Colorado, teachers in a 4:4 block can focus more on core learning and omit less essential materials from the curriculum.” (Wilson 1995). A. Leroy Huff (1995) has been involved in alternative scheduling at his school for 3 years and in his article he lists several benefits of the system. This list includes things such as: “teachers have sufficient time to develop concepts; students have four classes to prepare each day instead of six or seven; immediate application of concepts is more feasible.”. These are real concerns in Buena. In a society where students have reduced out-of-school-time due to extra-curricular activities, jobs, and family obligations, it is important to maximize the potential for the
time they do spend in school. By having students focus on fewer subjects at one time, it will direct their attention. It is interesting to consider how teachers would react if they were asked to work on seven or eight preparations each night, yet that is what is asked of students on a regular basis.

Overall, Buena will benefit greatly from the results of this study. The very least that will be accomplished is a concrete finding to prove that Buena's concerns need to be addressed in areas other than scheduling. From a more positive standpoint, the district may be presented with a form of alternative scheduling that will alleviate some of its overcrowding, underfunding, poor climate, and time constraints.

Organization of the Study

This study will consist of four additional chapters. Chapter 2 will focus on reviewing the literature related to alternative scheduling, in order to give credence to the idea that there is an alternative scheduling system that will enhance the operation of Buena Regional High School. Chapter 3 will address the design of the study. Research methods, data collection instruments, and the data analysis plan will be discussed in this chapter. Chapter 4 is the presentation of the research findings. It will deal with the information found and it's meaning. Chapter 5 will address the conclusions and implications of the research and provide suggestions for further study.
Chapter 2
Review of the Literature

Introduction

Block scheduling is a topic that has gained popularity in the nineties, because of factors such as: increasing enrollment, decreasing funding, poor school climate, frustration with traditional time constraints, and research in how students learn. There is a plethora of literature supporting this type of scheduling, as well as, some maligning it as a fad with little educational value. The purpose of this chapter is to examine the literature that supports the idea that block scheduling is a viable alternative to traditional scheduling and can enhance instruction and learning.

The purpose of this study is to find a feasible block schedule for Buena Regional High School. The literature supports the idea that Buena, like many other districts nationwide, can utilize a restructuring of time for the purposes of improving climate, instruction, and learning. According to Duke and Canady (1991), "Policymakers are key persons in determining opportunities for students to learn, and the school schedule is the primary vehicle for providing those opportunities."
The Problems of the Traditional Schedule

The traditional schedule that most high schools utilize has attracted negative attention among some educational researchers (Carroll, 1990; Lammell, 1996; Canady and Rettig, 1995; Edwards, 1993). Traditional scheduling creates an impersonal feel in high schools. It is not a student-friendly environment in that students are expected to work for seven or eight different teachers each day for short periods of time. This system does not allow for an in-depth relationship between teacher and student because it provides too many changes in the day to maintain continuity for either the student or the teacher. In the workplace, professionals would appreciate neither working for seven to eight supervisors nor having seven to eight different projects to complete all at once.

Because of the number of classes that students must negotiate, traditional schedules have also created more discipline problems caused by extensive passing time between periods. These problems often affect instruction because they spill over into the classroom where the teacher must quell the students' emotions before teaching the material (Canady and Rettig, 1995). According to John A. Lammel (1996), "Secondary schools have maintained the status quo in regard to organization and the curriculum delivery system. Conversely, the society they serve and prepare students for continues to change radically." If schools are institutions intended to train students to function in a modern world, they must keep pace internally with the changes that are occurring externally. The National Education Commission on Time and Learning (NCTL) reports that the traditional system of scheduling in high schools does a disservice to students of all abilities because it forces low level students to move along with the class regardless of whether they have mastered the material; conversely, it forces high level students to wait
for those less capable (1994). The traditional scheduling system does not provide the flexibility that teachers need to accommodate all students without sacrificing the needs of others.

The NCTL report (1994) also makes the assertion that, "Research confirms common sense. Our students are caught in a time trap--processed on an assembly line scheduled to the minute. Our usage of time virtually assures the failure of some of our students." This statement is proven true in that all subjects are allotted the same time frame (40-45 minutes). It is illogical to expect that all subjects can be taught or learned in the same amount of time. The Carnegie Unit is another example of the "time trap"; students are given credit toward graduation for actual seat time. The Carnegie Unit has nothing to do with learning; it fosters a "punch the clock" mentality. Schools need to examine the structure of the school day and year when they look to improve the educational environment. The literature cited demonstrates that traditional schedules are a hindrance to both learning and teaching.

Impact on Teaching and Learning

When making a change in schools, the number one priority must be student learning. If the traditional schedule does not work and a new one is to replace it, the new schedule must facilitate the improvement of student learning. According to Driscoll, McCown, and Roop (1996), opportunities for "active learning", a general term for learning that occurs when the learner is mentally involved in a task, are what educators should be offering students. These types of opportunities are more difficult to offer when classes are short. With the current mandated curriculum and administrative pressure, teachers have difficulty finding the time to implement teaching techniques involving
active learning. These activities take a backseat to traditional methods, such as lecture and worksheets, which engage students on a minimal level. "Research has demonstrated that lecturing is the least effective form of instruction that teachers can use, but lecturing is common in U.S. secondary classrooms." (Huff, 1995). Teachers must be allowed the time to engage students' minds in meaningful thought.

Block scheduling provides time for active learning in the classroom (Rettig and Canady, 1997). Teachers are not constrained by the forty-minute bell. Research illustrates that, "...block scheduling generally had an impact on the instructional strategies used by teachers in their classrooms. Teachers identified changes in their use of instructional strategies and attributed them to block scheduling. These changes typically called for increased student involvement and participation in learning." (Besten-King 1997). The longer class periods provide time to effectively utilize a variety of teaching techniques, such as cooperative learning, learning centers, Socratic seminars, and models of teaching that promote integrated curriculum and multi-intelligence instruction (Rettig and Canady, 1997; Winans, 1997; Canady and Rettig, 1996; Brett, 1996; Cunningham and Nogle, 1996; Huff, 1995; Buckman, Besten-King, and Ryan, 1995). Engaging students with their peers to solve problems is an essential facet of active learning that block scheduling facilitates. Providing teachers with longer blocks of time to teach and giving students fewer classes to learn helps to accommodate different learning styles (Ryan, 1996). Canady and Rettig make it clear that the success of block scheduling depends on the teachers' ability to, "harness the potential of the block and improve instruction." (1996).
It is important to note that the nature of block scheduling dictates fewer classes for students each semester, which allows them to devote more time and energy to mastering these subjects. In addition, when students are absent they have fewer subjects to make up. Block scheduling also allows schools to make more effective use of educational resources in the community; for example, a guest speaker in a class would not be forced to truncate a topic into a forty minute blurb, but instead may completely explore a topic. Students can also be afforded the opportunity to participate in intensive seminars on specific topics or issues. Science labs can be completed in one regular class period (Edwards, 1993). All of these benefits create more opportunities to learn.

Impact on Discipline and School Climate

As mentioned earlier, disciplinary problems can often hinder learning in the classroom. "Student discipline improves under all major forms of block scheduling" (Kramer, 1996; Kramer, 1997). Carroll's research showed a dramatic decline in the amount of suspensions in four of the five schools that he studied (1994). Many discipline problems occur in the hallways between classes when students are crammed together and supervised less closely. Block scheduling provides fewer instances of passing time in a day. While traditional scheduling provides anywhere from eight to twelve separate occasions for class changes, block scheduling usually involves four to five. This drastic decline in the number of times students are loosely supervised results in fewer discipline problems. According to Nancy Bush-Lange, Principal of Evergreen High School in Vancouver, Washington, "...since block scheduling was implemented at Evergreen High, discipline problems have decreased and morale increased. There are fewer
fights..." (Sommerfield, 1996). Decreasing disciplinary problems is only one way that block scheduling improves school climate.

"School climate is defined as 'The enduring characteristics that describe the psychological character of a particular school, distinguish it from other schools and influence the behavior of teachers and students,... the psychological 'feel' that teachers and students have for the school,'" (Buckman, Besten-King, & Ryan, 1995). "There is strong anecdotal evidence that switching to an intensive or alternating-day block schedule has a positive effect on school atmosphere." (Kramer 1997; Buckman, et al., 1995; Ryan, 1996; Schoenstein, 1995; Dalheim, 1994; Rettig and Canady, 1997). Carroll claims that improved relationships between teacher and student, as well as, fewer classes per day put less stress on both teachers and students, thus, resulting in improved behavior in students and a better climate in the building (1994).

According to the action research of Hottenstein and Malatesta, "The-end-of-the-year survey indicated that between 85 and 95 percent of students, parents, and teachers supported intensive scheduling." (1993). A scheduling system that elicits such a positive response from all of the people involved is bound to improve school climate. The principal sets the tone or climate in a school; whereas, the teacher sets the tone in a classroom. If the teacher believes in and enjoys what is happening in the classroom it is reasonable to conclude that students will be more likely to enjoy the setting, as well. According to Buckman et al. (1995), "Teachers reported that they liked having more time to give students individual assistance; opportunities to get to know the students personally; time for more creative and meaningful student work; and the ability to structure a full lesson, to introduce a topic or concept, discuss it, and bring it to closure."
The educational benefits a block schedule provides also work to improve the climate of the school.

Block scheduling offers many other advantages to schools. According to the National Council of Teachers of Mathematics (NCTM), "...studies of block-scheduled schools show...fewer dropouts, fewer discipline problems, and a less hectic school atmosphere after switching to block schedules. Teachers say students' attitudes toward learning improve and attendance rates increase." (1996). Block scheduled schools provide more opportunities for students (Huff, 1995). The new schedule at Asheboro High School (N. Carolina) allows students the opportunity to enroll in six to eight more classes over four years than their previous traditional schedule permitted. It has also allowed the school to offer more electives, such as biotechnology, and environmental science (Winans, 1997).

Converting to Block Scheduling

The final area to address on the subject of block scheduling is the smooth transition from one system to the other. The success of this transition can determine the future of block scheduling at a school. According to Freeman and Scheidecker (1996), "When block scheduling fails, it is often for four reasons: (1) schools jump into it too hastily; (2) administrators impose it from the top, unsympathetic to the teachers', students', or community's feelings; (3) teachers aren't given training in instructional strategies for the new delivery system; and (4) it is implemented without sufficient examination of other school policies." These concerns are not exclusive to block scheduling; anytime change is implemented improperly it is doomed to failure.
There are many processes for effecting change in school that can help administrators implement a block schedule smoothly (Fitzpatrick and Mowers, 1997; Hackmann, 1995; Cunningham and Nogle, 1996; Pierson, 1997; Anderson, Brozynski, and Lett, 1996; Fullan, 1991). Although the theories of change cited above are slightly different from one another, they all rely on several common principles. It is important to employ a systems thinking approach. A change this large cannot be made without considering how all of the parts of the system will affect one another and ultimately how the whole organization will be affected. Gaining the support and soliciting the input of all those involved in the change, including: the community, the students, the teachers, and the administration, will make the transition much smoother. If any of these groups are unwilling to buy into the change, it will not allow the process to run smoothly. It is essential to make sure that the teachers ultimately drive changes because they must actually implement these changes.

Researching block scheduling and visiting schools that are utilizing it will provide valuable information. This aspect of change is critical in deciding how to implement the schedule and how to avoid the mistakes that other schools have made. The change process must also include time allotted for the stakeholders to meet and discuss their concerns, findings, and feelings. Without this collaboration, misinformation and rumors are bound to arise, causing the change process to break down. Once a block scheduling model is chosen, the faculty must be thoroughly trained in the model through a series of in-service sessions; they must be shown new techniques for appropriate teaching methods, lesson planning, classroom management, and bookkeeping. This component prepares the people who will be implementing the change; therefore, it is crucial to the
success of the transition. Finally, it is important to provide an evaluation component to any model of change, in order to gauge the success or failure of the project.

Conclusion

After reviewing the literature, it is apparent that block scheduling does provide a variety of educational opportunities for students, teachers, and administrators. Utilizing a proper model for change, Buena Regional High School could make the transition to a block schedule smoothly. The possible benefits of the system, including: improved school climate, more active learning in classrooms, less discipline problems, varied teaching techniques, and more opportunities to take courses, make it clear that a change would have a positive effect on the organization. Based on this review of the literature it is reasonable to search for or create a model of block scheduling that is feasible for Buena Regional High School.
Chapter 3
The Design of the Study

General Research Design

The purpose of this study was to research various forms of alternative schedules in order to find one that was an effective alternative for Buena Regional High School; and, conduct a feasibility study of uniting the setting with the schedule. A qualitative research design was chosen. It involved extensive library and Internet research of the different types of block schedules. It also entailed contacting educational practitioners who were engaged in a block schedule at the time of the study. The other aspect of the research project, which was eventually connected to the research of block schedules, involved collecting and analyzing opinions about the feasibility and effectiveness of implementing a block schedule at Buena Regional High School. This information was gathered from the administration and staff because they would be directly involved with the implementation and; therefore, the success of a new schedule.

The library and Internet portion of the research was largely represented in Chapter 2. Gathering first hand information about block schedules from educators working in the system was accomplished through personal interviews either over the phone, face to face,
or on the Internet. Once again, this portion of the research was mainly for background on the topic of block schedules.

The research was conducted in a natural setting. The survey design was selected for the study as an outgrowth of the nature of the information being solicited. Assessing the perceptions of the administration and staff of Buena Regional High School was necessary to include those involved with this type of change. Surveys offered the educators an opportunity to express their opinions on block scheduling in a non-threatening medium. The respondents were provided with anonymity and the choice of responding briefly or extensively. The research design also entailed an analysis of the concerns that the educators at BRHS had in an attempt to find similarities that would point toward a feasible variation of block scheduling. The underlying belief which drove that analysis was that no form of scheduling change would work if it did not address the major concerns of all those involved in implementing the change.

Development and Design of the Research Instruments

The data collection instrument used for this study was a survey developed using the model found in the text, *Research Methods in Education*. A brainstorm session was conducted to come up with the major framing questions for the survey and eventually the actual survey items. A first draft of the survey was created. Educators at the instructional, administrative, and University levels reviewed the draft. Using the input from all of those who reviewed the draft, a final survey was constructed.

The final survey consisted of a variety of question types; including selected-response and forced choice items such as priority ranking items and Likert scale items; as well as open ended items involving a written response. The questions addressed
perceptions of block scheduling, concerns about the current scheduling system, perceptions of the need for change, and basic professional information. These survey items were designed to provide responses to the framing questions.

The interviews that were conducted with professionals from schools engaged in block schedule were informal. They consisted of questions similar to those in the Buena Survey. The casual nature of the interviews allowed the interviewees to provide information in a conversational and anecdotal format. This provided practical insight into the success, failure, and general experience of those who have gone before. Some information was gathered from professionals over the Internet. These educators responded to questions posted in a chat room. The questions were of the same nature as the interviews.

Sampling Technique Used in the Study

It was feasible to use comprehensive sampling in the research because of the specificity of the study. The total number of professionals who would be involved in the direct implementation of a change to block scheduling is sixty-eight. This number includes the high school's teachers, guidance counselors, and administrators. The groups were chosen because the opinions of these professionals play an integral role in the successful implementation and maintenance of a new scheduling system.

Data Collection Approach

The data were collected using a survey that was sent, with a cover letter, to the administration, teachers, and guidance counselors of Buena Regional High School using the inter-office mail system. The population's surveys were individually placed in each
of their mailboxes by the researcher. This system ensured same or next day transmittal of the survey instrument and the same time frame for their return.

Two days prior to the deadline a reminder was placed in the mailboxes to encourage and remind the population of the deadline. When the deadline was reached there were non-respondents. All of the surveys to the administrators and the guidance counselors were returned. The researcher conducted a follow-up mailing during the week following the deadline. This mailing encouraged non-respondents to return the surveys or request another one from the researcher. This mailing prompted the return of five more surveys. This brought the total number of returned surveys to forty.

With twenty-eight surveys outstanding it was necessary to examine the possible reasons why this occurred. The researcher spent a week asking teachers if they returned the survey. If a teacher replied negatively they were asked if there was a reason why they did not respond. The overwhelming responses were that "the survey was lost in the shuffle" or "I've been too busy to respond". These responses did not indicate that there was any bias among the teachers.

Data Analysis Plan

The responses to the survey were compiled differently for each type of question. The priority ranking items were coded and ranked from the areas perceived to be most in need of change to those that are perceived to be least in need of change. The Likert scale items were also coded and percentages were determined for each response. The open-ended items were compiled on the computer to search for similarities and trends.

These statistics were interpreted and the concerns of all the parties involved were assembled in a document. This document was used as the criteria for matching the needs
of the school with a variation on block scheduling that would be feasible for the parties involved in its implementation at Buena.
Chapter 4
Presentation of the Research Findings

The instruments used to gather data were a survey that contained prioritization questions, Likert scale questions, and open-ended questions as well as interviews with professionals engaged in block scheduling. The survey was distributed to those members of the Buena Regional High School staff who would be responsible for the implementation of a block schedule; including teachers, supervisors, guidance counselors, and administrators. The following results are based upon the forty surveys that were returned.

Respondents were asked to prioritize a list of items that the school community should focus on changing. This list was comprised of eight items including, "Teacher Training", "Structure of the School Year", Structure of the School Day", "Teacher Observation System", "Course Offerings", "Discipline Referral System", "Parent Education", and "Teacher In-Service". Table 4-1 illustrates the breakdown of responses.

Table 4-1

<table>
<thead>
<tr>
<th>Areas for Possible Change</th>
<th>Avg. Response</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Training (pre-service)</td>
<td>4.2</td>
<td>4th</td>
</tr>
<tr>
<td>Structure of the School Year</td>
<td>6.5</td>
<td>8th</td>
</tr>
<tr>
<td>Structure of the School Day</td>
<td>4.9</td>
<td>6th</td>
</tr>
<tr>
<td>Teacher Observation System</td>
<td>5.8</td>
<td>7th</td>
</tr>
<tr>
<td>Course Offerings</td>
<td>3.1</td>
<td>1st</td>
</tr>
<tr>
<td>Discipline Referral System</td>
<td>4.1</td>
<td>3rd</td>
</tr>
<tr>
<td>Parent Education</td>
<td>3.8</td>
<td>2nd</td>
</tr>
<tr>
<td>Teacher In-Service</td>
<td>4.4</td>
<td>5th</td>
</tr>
</tbody>
</table>
The table illustrates the opinions of the staff with regard to the school's need for change. The column labeled, "Average Response" indicates the average ranking of that particular item. This means that there are respondents who answered with a higher number as well as a lower number. But, the average does reflect the general feeling of the population. The column labeled, "Ranking" shows the population's opinion on the urgency of each item's need for change.

Table 4-1 indicates several important statistics that directly impact the search for a block schedule to suit the school. The number one ranking of the item labeled, "Course Offerings" is a positive finding because block scheduling is often a vehicle for providing schools with more options in the area of course selection. Conversely, the number six ranking of, "Structure of the School Day" and the number eight ranking of, "Structure of the School Year" indicate an overwhelming negative feeling for changing the nine period, 180 day school structure. Looking deeper into the 6th and 8th place rankings, it is possible that the staff simply saw those two choices and assumed it meant the block scheduling with which they have been presented would be the alternative. This is only speculation and unfortunately, it is evident in all of the literature that if those involved in the implementation of the change to a block schedule are not supportive, it will not work. Overall, the first survey item does not indicate that the school staff overtly sees a need to change the structure of the school day or the school year.

The next five items on the survey are questions that require Likert scale answers including "Strongly Agree", "Agree", "Disagree", and "Strongly Disagree". These questions are aimed directly at the issue of block scheduling, traditional teaching
methods, and increased time increments for students and teachers. Table 4-2 displays the questions and the responses of the staff members in percentages.

The responses to these questions illustrate divergent thinking among the staff of Buena High School. Only the first question in the chart, which deals with the issue of improving the current educational delivery system, elicited a response that indicated

Table 4-2

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The current system for delivering education could be improved (i.e. Traditional methods--lectures, etc.)</td>
<td>32.50%</td>
<td>47.50%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Block scheduling would be educationally beneficial to students</td>
<td>12.50%</td>
<td>37.50%</td>
<td>32.50%</td>
<td>17.50%</td>
</tr>
<tr>
<td>The currently scheduled time allotment for an instructional class period is sufficient (40 minutes).</td>
<td>15%</td>
<td>50%</td>
<td>27.50%</td>
<td>7.50%</td>
</tr>
<tr>
<td>An increased time allotment would benefit teachers.</td>
<td>7.50%</td>
<td>42.50%</td>
<td>37.50%</td>
<td>12.50%</td>
</tr>
<tr>
<td>An increased time allotment would benefit students.</td>
<td>10%</td>
<td>47.50%</td>
<td>32.50%</td>
<td>10%</td>
</tr>
</tbody>
</table>

that an overwhelming majority of the staff feels one way. Eighty percent of the staff feels that the current methods could be improved. Although block scheduling is designed to foster innovative teaching methods that incorporate active participation, cooperative learning, and a variety of research proven methods, the following four question elicited a less enthusiastic response.

When asked if block scheduling would be educationally beneficial to students, the respondents equally divided. Fifty-percent felt that it would be beneficial and fifty-percent felt it would not. This is the same division that occurred when they were asked if an increased allotment of time would benefit teachers. In many cases a fifty-percent
positive response would be very promising for the issue at hand. In the case of effecting school change that response is not promising. What it means is that not only will fifty percent of the people implementing the change be unsupportive, but more than likely they will work to undermine it. Such a split response also indicates that there is more to the question than what it says on paper. The fact that fifty percent of the respondents felt that an increased time allotment would not be beneficial to teachers indicates a level of fear associated with being in the classroom for more time than they already are. It could indicate a simple resistance to change or a blatant fear of occupying the extra time with meaningful substance. It could also indicate a belief that these educators do not feel that more time in the classroom is the answer. In any event with only half of the staff in support of the idea it is not plausible to implement it without a great deal of public relations and persuasion.

Sixty-five-percent of the respondents feel that the current time allotment for classes is sufficient. Once again this statistic indicates a feeling that time is not the issue. Improving education in Buena Regional High School lies in some other aspect of the organization. Fifty eight percent feel that an increased allotment of time would benefit students. This figure also illustrates that not enough support exists to implement the change with confidence.

There is no dominant trend to the Likert scale questions. The statistics actually conflict with one another at times. It is evident that the staff is divided on the issue. The divisions are not minor; they encompass large factions of the staff. Based upon these findings it would be difficult to implement a change to block scheduling.
The final section of the survey instrument consists of six open-ended questions. These questions were designed to afford the respondents the opportunity to supply their opinions in their own words. This section is less confining than the prioritized list and the Likert scale items. Open-ended questions also provide an opportunity to view the reasons behind the choices. In these reasons trends begin to appear.

The first open-ended question asks the respondents for their concerns with the current forty-minute class period. There were many concerns, as well as, a large number of respondents who had no problems with forty-minute periods. Among those who did have concerns, a trend emerged regarding a lack of time for teachers to teach. Some examples include; "Not enough time spent teaching," "In order to do some hands on lessons a longer class period is necessary," and "There is not a sufficient amount of time to cover material. It seems like every time you get the students finally involved, the bell rings." These sentiments were expressed by many of the respondents and indicate that some form of extended period would be appreciated. Although this conflicts with some of the earlier data, the responses here seem more credible because they reflect the respondents' opinions in their own words. This does not mean that a change to block scheduling is feasible because of other underlying issues.

The next open-ended question asks what could be done to improve the current scheduling system? This question evoked a variety of responses. Although no real trend emerged, the wide array of ideas that were offered to improve scheduling illustrates that the staff is willing to brainstorm and discuss changes that they feel would be beneficial. The responses included ideas such as: "Two back to back sessions, one time per week for
each class you have as a creative lesson time period." Another respondent suggested that, "classes start 1/2 hour later and end 1/2 hour later in order to lower tardiness."

These suggestions come directly from the staff and indicate a desire to improve the current system. These respondents do not want a packaged "block scheduling" system handed to them, they want to craft a school schedule that specifically address their concerns. A key response given by several respondents dealt with the issue of teacher input. The teachers want more input into what they are going to implement. Most respondents do not seem to indicate that going to a block schedule is what they want, but that modifying the current system would be beneficial.

The next question yielded the greatest response of any question on the survey. This question asks the respondents to list their concerns with converting to a block scheduling system. The responses that appear most often concern the issues of staff reduction and compensation for teaching time. These responses shed light on much of the negativity toward block scheduling. Buena Regional High School teachers currently teach five class periods per day; under a traditional block schedule teachers would teach three blocks per day per semester. Three block periods is equivalent to six traditional periods in terms of actual minutes. This presents a contractual problem in that teachers in the high school are normally compensated for teaching a voluntary sixth period.

The issue of staff reduction is another key obstacle to implementing block scheduling. Under the traditional block scheduling system the average teacher would teach approximately 90 students per semester which works out to 180 students per year. This is 30-50 extra students per year. This increase in students would make it feasible for
the board of education to cut teachers. This is a possibility that many of the respondents do not wish to chance.

There are many other issues raised by the respondents, but for the most part the concerns can be handled with proper implementation of change, such as teacher in-service, proper budgeting for equipment, and curriculum changes. All of these concerns do not exist if the change is handled properly and the staff is given ownership of the process. The other major concern dealt with a belief that the possible lapse of time between incremental courses would increase the chances of content loss among students. This idea has been disputed by research, but it is one of those ideas that is difficult to change even with supporting research.

The next question requires a "yes" or "no" answer and a written response if the respondent desires. The question asks the respondent if a model of block scheduling that addresses the concerns they've listed in the previous question was developed, would they be willing to support its implementation? 77.5 percent of the respondents replied, "yes" and 22.5 replied, "no". This provides hope for a block scheduling system in Buena Regional High School, but it will be a monumental task finding a system that meets the needs of all of the respondents.

The next open-ended question asks the respondents to provide their understanding of block scheduling. This question provides insight into what the respondents are thinking when they are asked about block scheduling. The majority of the respondents feel that block scheduling is, "doubling of class periods and cutting the year into two different semesters." Although this is correct, it does not take into considerations the myriad variations on the idea of block scheduling, such as A-B block scheduling, 75--30--
75 block scheduling, etc. This response also provides hope that a form of block scheduling may be found to satisfy most of the people.

The final question on the survey asks how much time the respondents feel is needed for a daily instructional period? Although most answers were more than forty minutes they ranged from 15-90. This question yielded such a wide range of time frames that it is apparent that the Buena Regional High School staff has a wide variety of educational philosophies. This is another obstacle to finding a block schedule that appeals to the majority. When one staff member feels that classes should be 15 minutes with a 40 minute period once a week and another feels that classes should be 80 minutes everyday, it appears impossible to bridge that gap.

The in-person and Internet interviews that were conducted with professionals currently engaged in block scheduling provided positive data. These people were genuinely pleased with the switch to block scheduling. They felt that adjusting to the new time system was more of a freeing experience than a fearful one. These professionals did admit that they were not faced with the staff reduction and contractual issues because they were teaching six periods before the change. Morale improved in the schools that the interviewees worked. They felt that teachers' room conversations were rejuvenated and the extended planning periods were helpful. Overall, the information gathered from these interviews was positive and indicated that the majority of the fears associated with block scheduling occur prior to its implementation. After it is begun, those involved seem to adapt, adjust, and enjoy.

In conclusion, the data collected indicate that the staff of Buena Regional High School has much trepidation about implementing block scheduling. Their responses to
the survey instrument provide conflicting information. It is apparent from the responses that although there are areas where many teachers are receptive, the fact remains that a large number of staff members are not receptive to the idea and actually hold animosity toward it. With such a large number of staff members feeling negatively, it is very difficult to imagine implementing a minor change, let alone an all-encompassing scheduling system like block scheduling.
Conclusions and Implications of the Research

The focus of this study has been to determine the feasibility of implementing some form of block scheduling at Buena Regional High School. This subject has caused a great deal of controversy in the district and has even served to tie up negotiations between the union and the board of education in the past. Although there are many forms of block scheduling that could be implemented in the district, it is almost certain that the attempt would fail. Block scheduling is a systemic change that requires the support of most, if not all, of those involved in its implementation. This is a fundamental precept of effecting organizational change. The only form of block scheduling that might have a chance of working is A-B block scheduling. The reasons for these conclusions follow.

The first major impediment to implementing a block schedule is the fact that the staff does not perceive a great need to alter the school year or the school day. The data collected indicated that the staff perceived these items as not in need of change when asked to rank major areas in need of change at Buena Regional High School. If the staff does not feel that the current system is "broken" they will not support altering it. This conclusion implies that the staff finds other issues more pressing than altering the school
year and the school day. In fact, they feel that the area most in need of change lies in the
course offerings. Although block scheduling is directly linked to increasing and
diversifying the courses a school can offer, the staff did not link the two.

The staff evidenced a willingness to suggest ways to improve the system in their
responses to the data collection instrument. This indicated a desire to be involved in
making decisions concerning the changes that the school makes. Another basic concept
in successful school change involves empowering the teachers to craft the change. The
teachers at BRHS were not given the opportunity to provide suggestions to improve the
current system. Block scheduling was a term that was introduced to them by the
administration after the administrators had researched and bought into it. Teachers were
then expected to investigate block scheduling and reach the same conclusions. The staff
indicated in the surveys that the idea had been presented to them with great zeal on the
part of the administrators who were upset when the teachers did not react with the same
enthusiasm.

Once again the idea of staff support is the issue. Changes will not work without
the support of those expected to carry out implementation. The idea of teacher
empowerment is critical. When professionals feel that they control the change from its
inception to its evaluation, they are more apt to support it. All of the literature on block
scheduling states explicitly that it will not work unless the teachers are behind it. The
implication here is that a more transformational form of leadership should be used with
this staff, in that the teachers must be involved from the point of needs assessment. This
would negate the possibility of an adversarial relationship between staff and
administration.
Many of the other concerns voiced by the staff could be addressed with sufficient staff development, adequate funding, and proper implementation and evaluation. A great deal of discomfort was expressed about the extended class periods. Classroom management and instructional techniques must be modified and learned to effectively facilitate longer instructional periods. These issues would have to be addressed in a series of in-service and staff development workshops. Turnkeying would have to be utilized in order to make the endeavor affordable. Fiscal concerns are another problem. Many respondents felt that the district would not provide the funding necessary to furnish staff development, to purchase materials necessary for the innovative teaching techniques that will be used, or to hire the para-professionals necessary under the currently proposed system. These concerns would all have to be addressed in some formal manner to appease the staff.

The key obstacles to Buena Regional High School even attempting the 4x4 block scheduling that has been presented to the staff are the issues of compensation for additional teaching time and the possibility of staff reduction under the new system. These two concerns appeared in numerous responses to survey questions. The staff views the board with a level of mistrust due to many factors including cut backs in programs over the last five years. This situation makes a change as immense as block scheduling extremely suspect in the minds of the teachers.

The issue of compensation stems from the fact that teachers are currently contracted to teach five instructional periods. Some teachers teach six periods on a voluntary basis with a stipend attached. 4x4-block scheduling involves teaching three double periods each semester, which works out to six traditional periods. The district
does not intend to pay teachers the stipend that has been established in the contract; therefore, the teachers have shown resistance to the proposal. There are several ways around this problem.

One alternative is to modify the 4x4 block by assigning some teachers two instructional periods and a duty in the fall and three instructional periods with no duty in the spring and vice-versa. This would alleviate the contractual problem of time by simply reallocating the same amount of time currently spent on instruction and duties. This compromise seems amenable from a staff standpoint, but some issues with which the administration would still have to contend are class size and course offerings. This modification does not allow class sizes to drop, nor does it provide teachers with extra periods to teach electives. These were major boons in the eyes of the administration and it would remain to be seen if they would be willing to concede these things.

Another alternative to 4x4 block scheduling is A-B block scheduling. This form of block scheduling would also allow teachers to maintain the current number of instructional periods and still achieve the educational benefits of longer periods. Students would have each class every other day and; therefore, they would have half the number of courses to prepare for each day. But, this system still leaves the administration in the same position as the last alternative. Another factor to consider with both of these alternatives is the fact that many teachers surveyed did not feel that longer periods would be helpful and expressed negativity toward increasing the length of the instructional period. This does not bode well for the change.

Although these two alternatives provide a great deal of what the administration and the staff/union are looking for, neither one satisfies both groups. This is where the
spirit of compromise must come in. Neither of these systems will work unless both sides concede some things. It might be wise for the administration to concede extra course offerings and the split year to try A-B block scheduling. If this form of scheduling works out it could be a springboard to other changes once the staff buys into it.

The final concern is the issue of staff reduction. The block schedule that has been proposed to the staff increases the number of traditional instructional periods that each teacher carries. If looked at from an educational standpoint, this is a great opportunity to provide more sections of courses; thus, decreasing class size. If looked at from a financial standpoint it could also be an opportunity to keep class sizes the same and eliminate members of each department. The staff has expressed great concern over this possibility. The suggestion has been made that even if the reduction was not done overtly, it would occur when teachers retire or resign; the district simply would not replace the teacher leaving. This concern stems back to the staff's mistrust of the board of education.

The fundamental problem with this argument is that the staff has no current guarantee that staff will not be reduced. Although, the block schedule would make the reduction of staff easier to facilitate, the board could increase class size now and eliminate teachers. Unfortunately, the mistrust that exists will not go away. This is something that has been cultivated over years and cannot simply be swept away by promises. The union will not concede unless some of their concerns are negotiated into a contract. This is difficult because New Jersey does not allow the issue of staff reduction to be negotiated into contracts.

Conclusions and Implications for Leadership Development
This study has provided the intern researcher with an opportunity to apply effective strategies for assessing alternate forms of block scheduling. This skill is valuable to all transformational leaders who wish to effect change. The ability to assess options and analyze the effect that they will have upon the organization is critical. Without this skill organizational change is ineffective and inefficient, which essentially causes the leader to be the same. The intern will be able to generalize the leadership skill gained here to program assessment and evaluation, personnel decisions, financial considerations, etc.

The intern has also gained insight into the process involved in a feasibility study. This will serve as an asset for future leadership situations. In order to effectively convince a board of education as well as a staff that a change is possible, a comprehensive feasibility study must be conducted. Although this study focussed mainly on feasibility based upon the attitudes of those involved in the change, the skills used in this research can be generalized to the other facets of feasibility.

Overall, the intern has evolved during the course of the project. This process has allowed the intern to become more familiar with the workings of the educational organization and has provided insight into the various methods for successfully leading and changing the organization.

Organizational Change

Buena Regional High School has benefited from this project in several ways. The administration has received conclusions based upon data collected from the staff and may proceed with its future plans for implementation with greater insight into the perceptions and attitudes of those involved. The leaders of the organization may now craft a plan for
change that will meet with greater success. The members of the organization have also had another opportunity to voice their opinions of the proposed change in a formal research setting. This allows for a greater sense of involvement in the change process. The organization may decide to terminate its plans to implement block scheduling; however, if block scheduling is in the future of Buena Regional High School, information on the climate toward such a change is available.

Further Study

This study of the feasibility of changing to block scheduling at Buena Regional High School has raised several other issues worthy of research. First, the mistrust between the staff of the school and the board of education is a hindrance to the education of Buena's children. A study that would identify the causes of the animosity and produce some suggestions for future collaboration would increase productivity of the school and the district. This study would have to be of a qualitative nature and could yield positive results for all involved especially the children.

Second, a research study analyzing the attitudes of the staff of Buena Regional High School toward the current system of change utilized by the organizational leaders and the alternatives to it would provide information for future organizational change. This study would analyze the process that has been used in the past and the current system, while affording those involved the opportunity to suggest procedures that would encourage greater support for change.

Third, a study involving teacher exchange would be extremely beneficial to the organization. This research would consist of exchanging key staff members from Buena Regional High School with staff members of a school that is currently utilizing block
scheduling. Although this study would incur a great deal of bureaucratic hassle, it would allow teachers to experience block scheduling first hand and come back to the school with attitudes, perceptions, and opinions based upon first hand knowledge, rather than conjecture.

Finally, it is important to conduct a study in which a variety of block schedules are presented to the staff. This research would involve allowing staff members along with the administration to analyze different forms of block scheduling, choose one, and modify it to the school's individual needs. The study would involve a great deal of work on the part of the staff and a great deal of restraint on the part of the leaders. This study would have an excellent chance of yielding a compromise that all parties would accept.
References


Appendix A

Data Collection Instrument
Block Scheduling Questionnaire

Please respond to all questions as completely as possible.

Professional Information:

Job Title: ____________________________
Number of years in education
1-5 6-10 11-15 15-20 20+

1. Based on Buena Regional High School's need for change, prioritize the following 1 through 8, 1 being the most important.

   ____ Teacher training (pre-service)
   ____ Structure of the School Year
   ____ Structure of School Day
   ____ Teacher Observation System
   ____ Course Offerings
   ____ Discipline Referral System
   ____ Parent Education
   ____ In-Service for Teachers

Respond to the following by circling the answer that is closest to your opinion:
SA= strongly agree, A=agree
D=disagree, SD=Strongly disagree

2. The current system for delivering education could be improved (ie. Traditional methods--lecture, etc.)

   SA   A   D   SD

3. Block scheduling would be educationally beneficial to students.

   SA   A   D   SD

4. The currently scheduled time allotment for an instructional class period is sufficient (40 minutes).

   SA   A   D   SD

5. An increased time allotment would benefit teachers.

   SA   A   D   SD

6. An increased time allotment would benefit students.

   SA   A   D   SD
Please provide a brief response to each of the following. Use the back of this sheet if necessary.

7. What, if any, concerns do you have with the current 40 minute class period?

8. What could be done to improve the current scheduling system?

9. List the concerns that you have, if any, with converting to the block scheduling system. (Please prioritize)

10. If a model of block scheduling that addresses the concerns you’ve listed in #9 was developed, would you be willing to support its implementation?

Yes       No

11. What is your understanding of block scheduling?

12. How much time, if any, do you feel is needed for a daily instructional period?

Thank you for your time and cooperation.
Biographical Data

<table>
<thead>
<tr>
<th>Name</th>
<th>Bruce R. Arcurio</th>
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<tr>
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</tr>
<tr>
<td></td>
<td>Passaic, New Jersey</td>
</tr>
<tr>
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