Block Scheduling in Schools to Improve Academic Achievement

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Rationale

The idea of examining student achievement has gained much attention in today’s school systems. Due to this ongoing interest, there has been an increased focus on testing. Therefore teachers and administrators are being pressured to make sure they teach students the correct information that the students will be tested on, in which a lot of times comes down to evaluating the time they are using for instruction. This is why there are many schools that have changed from a traditional six or seven period schedule to a block schedule, where students only have four classes in a day. They think longer but fewer classes provides students more of an advantage to learning the material because they get to participate in more hands-on activities in their classes, thus forcing them to become more involved in their learning.

This issue concerns me because all of the students and teachers I have talked with this year throughout the county where I grew up have not switched to any form of block scheduling. Thus, I am concerned that the students in these schools may not be getting the most appropriate form of teaching and hands-on experience that is available to help improve their achievement scores. Therefore, I have researched the literature on block scheduling in order to examine if the schools in my county should begin to think about changing their school scheduling structures to block scheduling.
Block Scheduling in Schools to Improve Academic Achievement

From the late 1980s, schools have experimented with different types of alternative schedules and block scheduling has become one of the most widely used and examined form of scheduling. Childers and Ireland (2005) believe “neither all block nor all traditional schedules best serve all students, teachers, and subjects” (p. 49). They discuss their struggle in determining if their high school should change their traditional scheduling to full block scheduling. The board of education suggested they try scheduling block classes for certain courses and then schedule the remaining courses as traditional year-long classes. Ultimately, they developed a composite scheduling that they still use at their high school today and the numerous benefits that have come out of it.

Childers and Ireland (2005) believe their form of composite scheduling works because it is based on what they think is best for teachers and students. The success of this type of scheduling was identified not only by the support that was received from the superintendent, teachers, parents, and the board of education, but also the multiple advantages it provided the students. This approach to scheduling resulted in students having less homework at night because they had a lighter case load, more hands-on teaching and earlier graduation dates due to the block courses, in addition to helping at-risk students because they would be taking fewer classes at a time, allowing them to concentrate more on their academics.

The same time the push toward block scheduling was going on, there was an emergence of national standards in mathematics. “The type of active learning methods advocated in block scheduling is consistent with the original and more recent recommendations of the national mathematics standards” (Flynn, Lawrenz, & Schultz, 2005, p. 14). These national, state, and local reform mandates were put into place to help improve the use of instructional time in
schools. In response to these mandates, many schools have adopted block scheduling in order to increase the quality of all students’ high school experiences. In Hughes’s (2004) study, he examined the impact changing to block scheduling has on overall academic performance by measuring students’ Grade Point Averages (GPA). Several benefits came to light from his study. The longer class periods provided, “greater flexibility and variety of teaching techniques,” “students were able to explore a topic in greater depth and detail each day,” and “teachers had fewer preparations and courses allowing them to be more energetic and better prepared to teach” all in which helped to enhance students achievement (Hughes, 2004, p. 663).

Lewis, Dugan, Winokur, and Cobb (2005) also carried out a study examining the effects of block scheduling on high school academic achievement. In their study they compared students mathematic and reading achievement test scores from schools that follow traditional scheduling to schools using 4 X 4 block scheduling and alternate day block scheduling (A/B). Lewis et al. (2005) found that “students in the 4 X 4 group showed an increase over time in both mathematics and reading achievement and had larger gain scores than did students in the traditional group” (p. 79). In addition to the block scheduling increasing students’ academic achievement, this study also found that block scheduling often results in better nonacademic outcomes than traditional scheduling does as well. For example, schools that implemented the block scheduling revealed more positive classroom climate as well as enhanced instructional opportunities for the teachers and students. Hughes (2004) and Gullatt (2006) also found some results along these lines of nonacademic enhancements in the schools. They found that with block scheduling having fewer class changes throughout the day this has helped reduced the potential for discipline problems in school, as well as improving student attitudes, a calmer school atmosphere, and better discipline.
Although block scheduling has verified its feasibility in high schools, there has been little research examining its effects at the middle school level. Due to there being a decline in students achievement throughout the middle school years because of the transitional year when students move from elementary to sixth grade, Mattox, Hancock, and Queen (2005) performed a study examining the effect block scheduling has on sixth-grade students mathematics achievement scores. Their study revealed “marked increase in sixth-grade students’ mathematics achievement after the students’ schools transitioned to block scheduling” (Mattox et al., 2005, p. 11). Therefore, block scheduling is not a concept that only high schools should be looking into, but middle schools just the same. Middle schools that have implemented block scheduling seem to reveal the same results and benefits that high schools have as well.

There has been a clear indication that maintaining a direct lecture mode of teaching does not work as well in the longer class periods of block schedules. Therefore, teachers must try to have at least three different modes of teaching activities for the longer class periods, such as including more skill development and hands-on activities. Two specific subject areas that have been widely used in assessing for students academic achievement with block scheduling are mathematics and science. Gullatt (2006) indicated that “mathematics is presently the most discussed core subject area when the concept of block scheduling is approached” (p. 256).

However, beyond the idea of overall block scheduling, there is the possibility of blocking or integrating specific classes. Particularly with the subjects of mathematics and science, there has been the idea of teachers integrating these two subjects and working as a team to focus on the common ideas between them. The block scheduling process allows for this to be possibly because it provides longer class periods so teachers can implement more advanced and hands-on projects that incorporate both subjects together for students to work on in the classroom setting.
In addition, “a tremendous benefit to an integrated math-science course is that redundancy is greatly reduced” (Marshall, Horton, & Austin-Wade, 2007, p. 37).

Lorentz, Morgan, and Tallman (2003) also researched this idea of integrating courses. In their study, they looked at the impact course integration had on students’ grades. They found three distinct levels of block integration that can be implemented:

The highest level involves joint teaching for formerly separate classes and simultaneous team teaching at least part of the time for which a single overall grade is given. A second level retains the use of separate course grades but requires students to take all block courses during the same semester and involves some common assignments and grading. A third level requires the coordination of definitions and examples and the use of integrating cases across a set of courses designed to be taken during different semesters. (Lorentz et al., 2003, p. 135)

Overall, the main goal of blocking courses together is to increase students understanding of how concepts in different courses are integrated and how they interact with one another. For example, there is quite a bit of math knowledge needed when working in the field of science. Therefore, in the classroom, teachers will develop projects and activities where students will have to use the knowledge they learned from both the science and math portions of the class. However, even though Lorentz et al.’s (2003) study suggested that the block format did not contribute to any inflation in the student’s grades that does not mean integrating courses is a bad idea. More research needs to be done in this area in order to examine its effectiveness.

In researching this literature on block scheduling I have come to the conclusion that the schools in my county could definitely benefit in many ways by changing their school scheduling structures to some form of block scheduling. The next step would be for me to decide how to
begin promoting this idea to the different schools and then figuring out which form of block scheduling would work best for each school. Mowen and Mowen (2004) believe that following their nine steps provides a unique and creative way for answering the question of whether a school should implement block scheduling or not. The success of this type of scheduling was identified through the support and positive responses they received from not only the teachers, but also the parents and students. Mowen and Mowen’s (2004) nine steps included, considering different schedules, determining the school’s needs, coming up with different schedules, conducting a pilot, making the decision, providing training to teachers, informing everyone about the schedule, gathering feedback, and then making any necessary modifications.

Mowen and Mowen (2004) emphasize the facts that block scheduling can ease the transition for students when making the switch from a homelike environment of elementary school to the atmosphere of a high school. The block scheduling reduces the number of times students need to change classes, as well as reducing the number of classes students have in a day. Due to having fewer classes in a day with block scheduling, it gives unorganized students a better chance to stay on top of their homework assignments and projects. Block scheduling was also found to allow students the opportunity to schedule more elective courses, provide teachers with more time to implement a variety of instructional approaches, allow students to take more classes to possibly graduate early, let extra curricular activities and clubs meet during the day, allow students to repeat failed classes without falling behind, and also give teachers the opportunity of team teaching with teachers from other subjects (Gullatt, 2006).

It would definitely be a lot of work for just one person to try and change the scheduling process in the schools across a county. Therefore, it would be beneficial for me to find others that are willing to help make this change. Furthermore, in contemplating this change from
traditional scheduling to block scheduling, there are many things administrators and faculty should consider. Gullatt (2006) provides a thorough list of important considerations that should be looked at when making the decision to change to block scheduling:

1. Search for both success and failure stories resulting from schedule alterations. Note reasons for both findings.

2. Be mindful that the comparison of success or failure of schedule alterations in one location that is significantly different from the one considering the change may negate any reason for consideration of change.

3. Involve the community in the change process by letting members have input into the decision-making process and by organizing numerous informational meetings to discuss the change process.

4. Determine the reason for a change in schedule. For example, the purpose might be to improve GPA or decrease dropout rates.

5. Gather input from the affected faculty. Let the faculty help plan the process of change. Establish that the majority of the faculty wishes to adopt alternative scheduling and in what format that alteration will appear.

6. Provide target professional development for faculty involved in the transition.

7. Educate students who will be affected by the change in schedule what to expect in terms of time and pacing of courses and changes in other cocurricular activities.

8. Visit or contact a number of similar schools with experience in the schedule change process.

9. Reflect and plan often as the change in schedule is implemented.
10. Revert back to the traditional schedule if the results do not measure up to the expectations.

11. Change takes time. Be prepared for much research and discussion. Changes to school schedules need to occur with great planning. (p. 261-262)

There would definitely need to be more research conducted of other schools similar to those in which I would be looking at changing in order to see their success and failures. I also agree that the faculty and community should be involved in the decision-making process. Without the support of teachers and parents, such change would be very difficult to successfully complete. Faculty will also need to be offered professional development in order to increase the benefits of the block schedule format. I also agree that it is important to inform students of the change that will be taking place and what they should expect. That way they will be more likely to accept and go along with the change. Another idea to keep in mind as well is that it is a good idea to inform all that are affected by the change, the reasoning behind the change in schedule as well as the fact that if they do not receive the results they are looking for that they will revert back to the traditional schedule of the past.

Overall, this literature has definitely been useful in providing the benefits to changing to block scheduling as well as offering many concerns that should be taken into account. With Gullatt’s (2006) recommendations to consider when contemplating changing to another scheduling format, Mowen and Mowen’s (2004) step-by-step plan of how to implement block scheduling into a school, and the other literature that provides the many benefits to block scheduling, I think I have some great information that I could take to some of the schools in my county and present them with the idea of implementing block scheduling in their school.
References


