Overview of Block Scheduling Strategies

Why Is This Strategy Useful?

Advocates of block scheduling cite several advantages for students, including more uninterrupted class time and more opportunities to focus on content in depth. Advantages for teachers include longer periods of instructional time, fewer classes to prepare for, and fewer students to teach in one day. For both students and teachers, block scheduling can allow for closer, more personal relationships, which may be less likely in traditional environments. Block scheduling is most often implemented in middle or high schools.

Description of Strategy

Through block scheduling, schools essentially lengthen class periods so that students have fewer classes per day; therefore, students may enjoy different instructional techniques that could not be implemented in class periods of 45 or 50 minutes. Block scheduling may allow students to spend more time with their teachers, therefore receiving more personalized instruction. In addition, it may allow more time for conducting labs and covering advanced topics. Lesson plans of block scheduling should become more hands-on and involve less lecture. Researchers argue that effective professional development is critical to ensuring that teachers use instructional strategies that take advantage of the extended instructional time block scheduling permits.

There are several variations of block scheduling. The first two are the most prevalent, and best suited to middle or high schools.

- Four-by-four semester plan: Students enroll in four 90-minute courses that meet every day of the week for a semester, which equates to completing four year-long equivalent courses in one semester. (For more information, refer to the research abstract on 4 x 4 block scheduling.)
- Alternate day block (AB) plan: Students and teachers meet in three or four 90- to 120-minute classes on alternating days for the entire school year. (For more information, refer to the research abstract on alternate day block scheduling.)
- Trimester plan: Students take two or three 120-minute classes for 60 days and two or three traditional-length classes for the entire year.
- Extended time plan: Schools separate the academic year into three segments: two 75-day blocks, and one 30-day block. During the 75-day blocks, students enroll in three or four 90- to 120-minute courses daily. During the 30-day segment, students engage in remediation or enrichment activities.

Research Evidence

One research synthesis pointed to overall positive results of block scheduling. The synthesis concludes that findings from experimental and quasi-experimental studies have generally been positive for the effect of block scheduling on student grades, attendance rates, and graduation rates. The synthesis authors also noted that many studies have found that principals, teachers, and students are very satisfied with block scheduling, and teachers perceive student/teacher relationships to be improved because there is more time for concentrated interactions. However, they also point to some negative outcomes, including student reports of being more tired, less attentive, and having more busy work.
In addition, at least two matched pairs studies showed statistically significant positive effects of block scheduling, as compared to traditional scheduling, for diverse secondary school student populations. The measures were standardized test scores in English language arts and math.

Sample Studies Supporting This Strategy


The purpose of this study was to produce a systematic review and synthesis of evidence-based research on the effect of block scheduling on student achievement in United States high schools. This report provides a brief introduction to block scheduling, chronicles the search strategies used to locate the final literature set, and describes the processes employed to code the studies on outcome, intervention, and methodological criteria using the What Works Clearinghouse (WWC) framework. In addition, findings, conclusions, and recommendations are discussed for the studies that merited inclusion into the block scheduling evidence base.


The effects of a 4 X 4 block scheduling program in a middle school on a variety of student measures were investigated. These measures included standardized achievement tests in mathematics, reading, and writing, cumulative and semester grades in middle school and high school, attendance rates, and enrollment rates in advanced high school courses (in mathematics only). The block scheduling program had been in effect for four years allowing analyses of current middle and high school students who had experienced a minimum of one and one-half years of block scheduling while in middle school. The primary research design was a post-test only, matched pairs design. Students were matched on school characteristics, gender, ethnicity, grade level, and 5th grade standardized reading scores. Results were relatively consistent with the extant literature and generally positive.


The effects of a full (4 X 4) block scheduling program and an alternate day (AB) block scheduling program in a junior high school were under investigation in this study through the use of an *ex post facto*, matched sampling design. Measures investigated were standardized achievement tests in science and language arts. Both forms of block scheduling had been in place for several years, and one teacher in science and one teacher in language arts had taught students under both forms of scheduling. Because the sampling designs and analyses were different for the science and the language arts areas, two studies are reported here—each examining the effects of 4 x 4, AB, and traditional scheduling with attribute variables of gender and student skill levels in each analysis. Results consistently show students in both forms of block scheduling outperforming students in traditional scheduling, and that AB block scheduling has the largest positive impact on low-achieving students.
Additional Resources

Block scheduling: A solution or a problem? Available at:
http://www.educationworld.com/a_admin/admin/admin029.shtml


Block scheduling: Some benefits but no magic fix. Available at:


Mathematics education and block scheduling. Available at:
http://mathforum.org/mathed/block.schedules.htm

ERIC Digest: Block scheduling. Available at:
http://eric.uoregon.edu/publications/digests/digest104.html

Policy Briefing: Block scheduling in secondary schools. Available at:
http://www.prel.org/products/Products/block-scheduling.htm

Trimester schedule research brief. Available at:

Wunderlich, K., Robertson, T., & Valentine, J. (2000). NMSA research summary: What types of block schedules benefit middle school students? Available at: