Block Scheduling: Why Don't We Know Whether it Really Works?

current
research

David V. Loertscher and Blanche Woolls

35

David V. Loertscher
and Blanche Woolls
are professors at the
San Jose State
University School of
Library and
Information Science.

Many school library media specialists in the country find themselves faced with a major organizational change from the usual six- or seven-period day to a block schedule. No other organizational change seems to affect so many—teachers, students, and the library—so suddenly. In this brief article, we look at the concept of the block schedule, research about it, how it affects the library media program, and ideas for maximizing the positive features of the block schedule in the library media center.

Background of Block Scheduling

With a call to action, "Reclaim the Academic Day!" the National Commission on Time and Learning (NECTL) issued its report, Prisoners of Time, in 1994.[1] Their premise:

> . . . We have been asking the impossible of our students—that they learn as much as their foreign peers while spend-ing only half as much time in core acad-emic subjects. The reform movement of the last decade is destined to founder unless it is harnessed to more time for learning.[2]

This report recommended that academic instruction include at least 5.5 hours of core academic subjects: English and language arts, history, mathematics, science, civics, geography, the arts, and foreign languages. Other activities deemed "worthwhile," such as remediation and enrichment activities, athletics, extracurricular activities, study hall, and health and social services, should be before or after the core.

Arguing for longer class time above the usual 45 minutes in core subjects, Lauren Resnick states, "The personal mental elabora-tion that is necessary for successful learning takes time—much more time than is typically allowed for the study of any topic in the school curriculum."[3]

A variety of ways exist to institute longer core subject time blocks. Many schools expand the usual six-period day into two days contain-ing three 100-minute periods. On purple day students attend three classes and on white day they attend the other three. Another pattern has elective classes every day for 45 minutes and core classes every other day for 100 minutes.

The Research on Block Scheduling

Relatively little substantive research tests the effectiveness of the block schedule and some of it is controversial. According to the research reported by Mistretta and Polansky, the assump-tions of block scheduling include the following:

- Teachers would have increased time to improve their ability to become more creative in the classroom (Canady and Rettig, 1995).
- Planning time for teachers would increase (Canady and Rettig, 1995).
- Students would receive increased instruc-tional time (Canady and Rettig, 1995).
- More in-depth instruction would result in fewer disruptions (Cooper, 1994).
- About 80 percent of students and 85 percent of teachers on a block schedule would prefer remaining with the block (Tanner, Canady, and Rettig, 1995).[4]

Studies can be found that report successes such as decreases in discipline problems and lower dropout rates, increases in attendance, higher grade point averages, and increased course offerings.[5]

One study of the success of 4 x 4 (four classes each semester in 90-minute blocks instead of six 50-minute periods) showed that 80 percent of teachers, students, and parents believed the program was successful. While teachers, in general, "were using a variety of instructional strategies, there was an overuse of the lecture in at least 30 percent of the classes."[6]

Teachers enthusiastic about block schedul-ing consider that they are more intimately involved on a daily basis with helping individual students in the classroom and that their instruction can become more student-centered. When teachers threw out their old lesson plans, their level of creativity escalated. Many teachers reported using cooperative learning and had time to plan lessons to match student learning styles.[7]

Mistretta and Polansky note that when block scheduling is implemented properly, the following advantages will be realized:

- Reduced number of class changes and transitions during any one school day.
- Reduced duplication and increased efficiency.
- A reduction in the number of students seen by each teacher daily.
- A reduction in the number of teacher preparations per day.
- Reduced fragmentation.
- Flexible instructional environments.
- Variation of time based on the content area.[8]

In the most recent study we found (reported in *Educational Leadership*), 70 schools in Virginia were compared, some with various forms of block schedules and others on single schedules. Their conclusions follow:

> To support further the case for block scheduling, we offer the following observations. In block-scheduled schools, we have evidence of a greater emphasis on staff development . . . increased attention to instructional programs . . . [and the] perceptions of teachers and administrators that block scheduling has had positive impacts on the behavior of students with low academic ability, on achievement in math classes, on AP scores, on foreign language classes, and on the achievement of at-risk students . . . For achievement in the performing arts, perceptions were split, with students seeing positive benefits for block scheduling but teachers seeing a negative impact.[9]

In the same issue of *Educational Leadership*, a dissertation study done in a single middle school found positive results on final course averages and final grade point averages. The authors concluded that this result was probably due to the empowerment of teachers who suddenly felt they were more in command of learning.[10]

Library Media Specialists Respond

Since the authors found little research concerning block scheduling in our own field, we asked a class of practicing teachers and school librarians enrolled in a masters degree program to discuss various facets of block scheduling and its impact on the school library. They covered the following topics:

Impact on teaching. The group agreed that of all the ways to restructure a school, the block schedule instantly invokes major changes in teaching and in school libraries. Teachers are suddenly faced with a major assessment of their teaching practices and if they do not change, they face consequences since bored students after 50 minutes of lecture respond less well to 90 minutes of lecture.

Coverage of content. Our group reported enthusiastic response to the block schedule as teachers slowed the pace of coverage to a more in-depth approach to content. Block scheduling allows teachers time to build in cooperative group activities, time for reflection, and time to help every student during a single class. They pointed out that the subject areas react differently. For example, science teachers have more time to prepare and conduct full experiments in 90 minutes than in 45 minutes. English and social studies teachers seem to have more difficulty, and foreign language instructors have the most difficulty and often oppose block scheduling.

Student response to block scheduling. The group agreed with Edwards concerning the advantages for students:

- Fewer classes permit students to devote more time and energy to mastering subjects without adding to their total study time.
- Working with fewer teachers each day, students have fewer differences in learning and behavior expectations to address.
- If a student is absent or gets behind, there are fewer classes to make up.[11]

Students in the library media center. The group saw major advantages for the library

media center and the librarian. A 90-minute period gives students sufficient time to start researching and get involved in it before the time comes to an end. Library media specialists can cover searching skills and other information literacy topics in more depth with time for students to practice what they have just been taught. They find more students getting involved in their topics and coming in after school. They see evidence of increased quality of student productions. They are also more likely to provide correct citations for information since they are not in such a hurry. They are more likely to think about what they are finding because the pressure on them is less.

More time gives the library media specialist and the cooperating teacher a chance to help every learner, particularly the quiet ones. In shorter time periods, those students who always ask questions monopolize the time. Passive students will sit quietly, not being any trouble, but not learning either. The unmotivated student remains unmotivated. During the longer period, the teacher and the library have more time to draw out these passive students.

This group did suggest that students are more likely to go into depth rather than breadth in their courses. From a purely library research focus, they feel that this gives the students a chance to get through the information literacy model, that students begin to see the bigger picture, and that they conduct their research in a more efficient manner.

They agree with Teger, who sees teachers spending more time on hands-on projects, thorough discussions, field trips, lab work, in-depth study, cooperative group work, and technology applications.[12]

Library media specialists worry. The group noted that there is tremendous pressure on teachers to have their students do well on achievement tests that usually measure breath of learning. Yet the block schedule encourages lesser content but more depth. Performance on surface-learning tests is likely to be affected. If students score as well on tests even though they are on the block schedule, we could argue that one realizes the advantages of both worlds.

Our Conclusions

For the library media center, the opportunity to engage students in longer periods of time has some obvious advantages as the time increases from 45 minutes to 90 minutes or more. Research time, engagement, thinking time, production time, reading time, reflection time—all increase before the merciless bell rings. In 45 minutes, by the time students get settled and are introduced to resources, there is little time for actual research. And the opportunity to cover more of the entire research process model should significantly increase their information literacy. Time to help every student rather than the anxious few seems to be a major advantage.

As library media specialists, we don't often make the decision for or against block scheduling, but we are one voice—one important voice. It gives us yet another avenue to lead. The very nature of block scheduling encourages more project-based learning, and that means library time and technology.

As block scheduling is implemented in the building, the library media specialist is in a strong position to observe the impact on the entire school—both in the lives of students and in the struggles teachers are having with its implementation. Again, if library media specialists document this impact in ways other that just impressions or observations, they are in a strong position to help decision-making bodies make adjustments for everyone concerned—from foreign language teachers who are worried to science teachers who are overjoyed.

Changes of this magnitude in a school and in a library media center cry out for action research to document the impact. Taking baseline data about the number of projects, the types of projects, the quality of projects, the number of teachers doing projects involving the library, and the increased use of information and technology systems should point the way to the impact of the library media center on learning.

Block scheduling is not a panacea. It is, however, another avenue for us to work with faculty who are struggling to succeed and suddenly realize they need help. Certainly, teachers can fail equally well on the block as on the short schedule. Being forced to change just may open a few minds to considering how we in the library media center can help. Library media center leaders know when and where to cast their nets. ●

References and Notes

1. C. M. Kane. *Prisoners of Time: Research: What We Know and What We Need to Know.* (Washington, D.C.: U. S. National

current
research

Education Commission on Time and Learning, 1994).

2. Ibid., 1.

3. L. B. Resnick, *Learning Futures: Reflections on a Learning Research Agenda.* [Unpublished paper] (Pittsburgh, Pa.: Univ. of Pittsburgh, 1992.)

4. G. M. Mistretta and H. B. Polansky. "Prisoners of Time: Implementing a Block Schedule in the High School," *Bulletin* 81 (Dec. 1997): 25. The three studies they used to compile their assumptions are: R. L. Canady and M. Rettig. *Block Scheduling: A Catalyst for Change in High Schools* (Princeton, N.J.: Eye on Education, 1995); R. L. Canady and M. Rettig. *Teaching in the Block: Strategies for Engaging Learning* (Princeton, N.J.: Eye on Education, 1996); and J. M. Cooper, ed. *Classroom Teaching Skills* (Lexington, Mass.: D.C. Heath, 1994).

5. D. C. Buckman, B. B. King, and S. Ryan. "Block Scheduling: A Means to Improve School Climate," *NASSP Bulletin* 79 (May 1995): 9–18.

6. A. J. Queen, B. Algozzine, and M. Eaddy. "The Success of 4 x 4 Block Scheduling in the Social Studies," *The Social Studies* (Nov./Dec. 1996): 251.

7. D. Hottenstein, and C. Malatesta. "Putting a School in Gear with Intensive Scheduling," *The High School Magazine* 1(Dec. 1993): 28.

8. Mistretta and Polansky, 27.

9. T. L. Shortt and Y. V. Thayer. "Block Scheduling Can Enhance School Climate," *Educational Leadership* 83 (Dec. 1998/Jan. 1999): 76–81.

10. M. D. DiRocco. "How an Alternating-Day Schedule Empowers Teachers," *Educational Leadership* 77 (Dec. 1998/Jan. 1999): 82–84.

11. C. M. Edwards. "Restructuring to Improve Student Performance," *NASSP Bulletin* 77(May 1993): 78–79.

12. N. L. Teger, "Block Schedules: A Restructuring Agenda," *Florida Media Quarterly* 21 (1996):7–10, 12–13.