Question:
- How does implementing a Block Schedule impact operating costs, curriculum issues, and early student graduation
- What other problems might manifest as the result of making the change?

Summary of Findings: There are definitely individual reports of block schedule proving disastrous over traditional scheduling, so it is no wonder that school leaders would enter into it cautiously. Below are more considerations on Block Scheduling.

Curricular Issues: Studies on Block Scheduling report that lengthened classes reduce the amount of instructional time spent on classroom administration; lessons can be extended and maintained with greater continuity; a less fragmented schedule allows students to focus on fewer courses at one time; students received more individual attention from teachers in the block design; there is advanced mastery of subject content, and improved course grades; most schools are able to offer a wider variety of elective courses; additional class time enables teachers to engage students in interactive learning; and there is equal or better mastery and retention of material. Teachers and students in alternating and semester block schools reported that learning is not watered down, but that it is different, with more focus on concepts than facts, more depth, and more problem solving.

According to Queen:
While teachers were initially concerned about maintaining student interest and motivation during longer class periods, they soon discovered that traditional methods of teaching were indeed limited in effectiveness when used extensively in the block classes. Fortunately, Mary Gunter, Thomas Estes, and Jan Schwab reported in 1990 that teachers found that the added time allowed them to design differentiated lessons to maintain greater student interest. In addition, teachers realized that varied instructional strategies such as cooperative learning, inquiry method, group discussion, concept development, simulations, and seminars could actively engage students in the learning process. Students also reported that they appreciated the extra concentrated time to study fewer subjects. With a smaller number of classes, students had fewer quizzes, tests, and homework assignments during any one day. Teachers saved time by keeping records and grades for just half the number of students. The reduced time spent on forms and paperwork gave teachers more time for instructional planning.

And Hackmann observed, too often block scheduling is adopted as an end in itself, not as a tool to facilitate a specific pedagogical approach.

Adequate staff development time is essential. Teachers who have taught in thirty-five to fifty-minute time blocks for years need help in gaining the necessary strategies and skills to teach successfully in large blocks of time. Teachers who are most successful in block scheduling typically plan lessons in three parts:
explanation, application, and synthesis. Most teachers have much less experience with the latter two phases than with the first. Teachers may also need training in cooperative learning, class building, and team formation.

Operating Costs: There appears to be no mention of a change in operating costs due to implementing a Block Schedule. No direct conclusion can be drawn from this other than it simply has not been studied. This could be for several reasons, including that it has never come up as an issue in the studies, or schools that have implemented Block Schedules have done so under the condition that they work within their existing budgets.

Early Student Graduation: There is no mention of early student graduation in the research, but several other factors that might also affect early student graduation were mentioned. Studies found that students were able to take a broader array of courses; increased numbers of students completed Advanced Placement courses; more course credits were completed; and advanced students have the opportunity for acceleration and enrichment. Researchers note that positive outcomes multiply when four "year-long" courses are taught in longer time blocks, each compressed into one semester. This pattern allows students to enroll in a greater number and variety of elective courses and offers more opportunities for acceleration. Students who fail a course have an earlier opportunity to retake it, enabling them to regain the graduation pace of their peers.

Other Issues: While block scheduling may offer many advantages, moving to a block schedule from conventional scheduling can be a major adjustment for both students and teachers. According to ERIC Digest 104, the process of making the transition is probably the biggest challenge: building support for altering such a time-honored tradition, and finding/creating the planning time needed to make the change.

ERIC Digest 104 suggests the following:

- A general presentation regarding the pros and cons of various models of block scheduling
- Visits by teachers, students, parents, and school board members to schools having block schedules
- Panel presentations by teachers from schools operating block schedules
- Faculty discussion meetings, leading to a vote or consensus
- Parent and community meetings
- Assemblies for students conducted by students from other schools or by their peers who have visited other schools
- Distribution of relevant research data and implementation procedures
- School board presentations and approval
- Staff development focused on the appropriate design of curriculum and use of extended blocks of time for instruction
Another study found that chairpersons experienced multiple learning curves and increased tensions between departmental and teaching responsibilities, problems exacerbated by reduced release time. The study recommends aligning job descriptions with procedures, implementing "department chair" professional development, and increasing chairs' release time.

Although findings are mixed, they generally agree that the benefits outweigh the challenges. Block Schedules can reduce curriculum fragmentation, discipline problems, and student failure. The transition can be smoothed with careful planning, building support, and professional development.

Online Resources:

ERIC Digest 104 March 1996
Block Scheduling
By Karen Irmscher
http://eric.uoregon.edu/publications/digests/digest104.html

Block Scheduling Revisited
By J. Allen Queen
All those with a stake in education must work to improve a scheduling format that offers great potential for student success. Mr. Queen provides some guidelines.
http://www.pdkintl.org/kappan/kque0011.htm

ERIC Resources
(Note: ERIC documents can be found by going to http://www.eric.ed.gov/ and entering the ERIC ID#)

The Block Scheduling Handbook.
Queen, J. Allen;
Block scheduling encourages increased comprehensive immersion into subject matter, improved teacher-student relationships, and decreased disciplinary problems. While block scheduling may offer many advantages, moving to a block schedule from conventional scheduling can be a major adjustment for both students and teachers. This guide is intended to ease the problems of change by combining a theoretical background with specific practical and proven tips and tools for implementing a block schedule. It discusses block scheduling in elementary, middle, and high schools. It offers guidance on curriculum alignment, pacing, and assessment models. It outlines effective instructional strategies for block scheduling, including classroom management and student-centered strategies. And it provides sample models, lessons, activities, forms, evaluations, and surveys for easy implementation.
ERIC #: ED469437
Block Scheduling: Changing the System.
Lewis, Roben W.;
This paper discusses why scheduling is a valuable but untapped resource for school improvement. It reviews some of the problems that are alleviated through scheduling, focusing on the benefits of block scheduling. The text discusses the fragmentation of instructional. It offers examples of how some high schools, middle schools, and elementary schools redesigned their schedules to reduce curriculum fragmentation, discipline problems, and student failure. Disciplinary problems can also result from fragmentation. Even in middle schools and high schools, traditional schedules create situations that may contribute to a number of discipline problems. Many disciplinary referrals result from schedule transitions, when large numbers of students mix together. Teachers need administrators' full support when changing to a block schedule, and the new scheduling should be routinely evaluated.
ERIC #: ED438625

Constructivism and Block Scheduling: Making the Connection.
Hackmann, Donald G.;
Phi Delta Kappan, v85 n9 p697 May 2004
The student-centered learning practices associated with constructivism could benefit from the increased class time that block scheduling offers. But, Mr. Hackmann observes, too often block scheduling is adopted as an end in itself, not as a tool to facilitate a specific pedagogical approach.
ERIC #: EJ703114

Implementing the 4X4 Block Schedule: Is It Worth It?
Walker, Sharron;
Rural Educator, v20 n3 p40-45 Spr 1999
The 4X4 block schedule was implemented in a rural high school in southern Arizona in 1997. Teacher and student surveys show that after the change, teachers were more satisfied with the teaching and learning environment, their relationship with students, and systemic supports, and students were more satisfied with school. Benefits, problems, and unexpected results of block scheduling are discussed.
ERIC #: EJ586577

The 4 x 4 Block Scheduling Model: What Do Teachers Have To Say about It?
Hurley, J. Casey;
A western North Carolina study explored how 31 teachers and 35 students viewed implementation of the 4 x 4 block schedule in five high schools. Teachers generally favor the 4-period schedule, but several cited absence problems, less student homework, and "uneven" student schedules. To reap full benefits from block schedules, principals must understand and anticipate potentially negative consequences, such as teachers' sacrifice of enrichment activities.
ERIC #: EJ555443
Pisapia, John; Westfall, Amy Lynn; 
In 1995 the Metropolitan Educational Research Consortium (MERC), Richmond (Virginia) commissioned a study of alternative high school scheduling modules to determine the effects of different schedules on teaching strategies, teacher and student satisfaction, and student and school performance. This report presents results of an analysis of student achievement and behavior data from 12 high schools, 3 inner city, 5 suburban, and 4 rural. Two traditional-day schedules and four variations of block scheduling were compared. Teachers and students in alternating and semester block schools reported that learning is not watered down, but that it is different, with more focus on concepts than facts, more depth, and more problem solving. Students in semester block schedules experienced greater increases in overall grade point average than those in alternating block schedules. 
ERIC #: ED411337

High School Department Chairs: Role Ambiguity and Conflict during Change. 
Mayers, R. Stewart; Zepeda, Sally J.; 
NASSP Bulletin, v86 n632 p49-64 Sep 2002
Examines challenges that high school department chairpersons faced while changing to a 4 x 4 block schedule. Finds that chairpersons experienced multiple learning curves and increased tensions between departmental and teaching responsibilities, problems exacerbated by reduced release time. Recommends aligning job descriptions with procedures, implementing "department chair" professional development, and increasing chairs' release time. 
ERIC #: EJ652050

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http://www.principalspartnership.com/

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