

Primer
Extended-Period Schedules

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January 1995

Introduction

Though a decade has passed since the 1983 publication of *A Nation at Risk*, improving achievement levels of American students remains at the top of state and national policy making agendas. Academic achievement is still linked to the state of the U.S. economy and competitiveness in world trade markets. Even scholars who characterize as myth the view that American students are not competitive internationally, nonetheless admit that the lower half of American students perform poorly (e.g., Bracey, 1994). As a consequence, schools continue to be pressured from within and without to improve. Further, increasingly the schools are expected to help solve problems of violence, poverty, and unstable families which disrupt communities and hinder students' success in school. Even staff at our most successful schools know that some significant percentage of students may not be prepared to live and work effectively in a highly competitive global community.

Most secondary schools have been engaged in efforts to improve. For many, the efforts are organized around one or more components of the current reform movement, implementing ideas such as: more participative management at the school level, outcome-based education or national curriculum standards, expanded use of computers and other instructional technology, or comprehensive staff development programs focused on more effective instructional approaches. This primer focuses on one change effort, namely, block scheduling, defined as having at least part of the daily schedule organized into longer blocks of time. According to the National Study of High School Restructuring report, block scheduling is being used in some fashion by one in ten high schools (Cawelti, 1994).

Reasons for Longer Classes

Teachers report the traditional 45 to 50-minute class period to be an obstacle when they attempt to include in their classes instructional approaches such as cooperative learning, hands-on activities, laboratory experiments, long term group or individual projects, and interdisciplinary lessons (Willis, 1993). These techniques have been touted because they enhance achievement, at least in part by engaging students in more active, participatory learning exercises, and by making learning more integrated and personally relevant. A seemingly simple way of addressing this problem is to lengthen class periods. With longer class periods, students can "delve more deeply into their subjects before the bell rings" (Willis, 1993, p.1). An

extended-period schedule contains fewer classes per day, therefore, teachers and students can concentrate and focus their use of time and energy.

Schools in the Coalition of Essential Schools were driven to change their schools' schedules by their commitment to nine common principles, such as "student-as-worker." They wanted to offer "seminars that encourage students to exercise their own critical thinking skills in a new area, serious projects in library or community, work in small groups at different levels with the teacher in a coaching role – all these require more than forty minutes at a time to achieve" (Cushman, 1989, p.36). Other Coalition principles, such as smaller student load for teachers, personalization, and demonstration of student learning through exhibition suggested that Coalition schools should either strip down the curriculum or schedule certain classes back to back to allow teachers to trade time to accommodate longer projects and field trips (Cushman, 1989).

Under proposals like the Copernican Plan (Carroll, 1987; 1990), classes are taught in much longer time periods, such as 90 minutes, for only part of the school year. Sizer and the Coalition of Essential Schools, as well as Carroll, argue that structural change in the whole school, including lowering the student load for teachers and changing the schedule, are crucial for pedagogical changes to succeed in the individual classroom (Carroll, 1987; Sizer, 1992). Similarly, Raywid (1994) found school organization and structure to sustain the other ingredients that make a school successful.

Despite a range of theorizing, Carroll found little research that directly supported his 1987 proposal. He did, however, find examples of large block instructional schedules which worked well for "private school students, for gifted students, for vocational students, for recent high school graduates in military educational programs, for regular high school students who attend non-remedial academic summer programs, and for special needs students who cannot cope with regular schedules" (Carroll, 1987, p.10).

Purported Advantages of an Extended-period Schedule (Canady, 1993; Carroll, 1990; Edwards, 1993; Willis, 1993)

- Facilitates in-depth learning, instructional strategies (simulations, group project work, debates, outdoor study, lab work) that work better in longer time blocks.
- Allows for varied assessment strategies such as exhibitions.
- Improves both teachers' and students' working conditions increases opportunity for teachers to improve instruction and student to take each class more seriously.

- Schedules fewer classes and fewer students per teacher per grading period.
- Permits more personalization of, and therefore, more individualized instruction.
- Decreases frustration of students (especially at-risk students) while they learn as well, probably better, with fewer teachers, sets of rules, and homework assignments daily.
- Provides students the opportunity to take more and varied classes during high school while simplifying the daily schedule – allowing for updating and expanding curriculum, including, for example, an eight-course, in-depth sequence in an area.
- Reduces school discipline problems because students are in the hallways less often.
- Because schools usually have a longer break between classes the schedule is less stressful resulting in more calm students and teachers.
- Wastes less teaching time on administrative duties such as roll taking, monitoring, passing, start up activities, and paperwork for teachers when they have only three groups of students.
- Makes team teaching and interdisciplinary teaching strategies easier to do.
- Eases implementation of approaches like competency-based education.

Sample Schedules/Programs

There are several types of schedules labeled “block” or “modified-block” schedules. (1) a 4-period day schedule, the same four classes held each day, with year-long courses completed in one semester; (2) and 8-block schedule, each day having 4 periods (1, 3, 5, 7 one day and 2, 4, 6, 8 the next), the same classes as in a 7-period day with the 8th period set aside for enrichment, activities, remediation, or assemblies; (3) an 8-block schedule, four days having 4 periods as in #2 above, and the 5th day having all 7 classes and an advisory period; (4) a modified block schedule with each class having short periods 2 or 3 days a week and 2 or 3 extended periods each week.

Schedule 1

PERIOD	TIME	MINUTES
1	7:30-8:55	85
PASS	8:55-9:05	10
2	9:05-10:30	85
PASS	10:30-10:40	10
3 LUNCH	10:40-12:35	115
PASS	12:35-12:45	10
4	12:45-2:10	85

Schedule 2

	Monday	Tuesday	Wednesday	Thursday	Friday
7:35-9:00	1	2	1	2	1
9:09-10:34	3	Enrichment	3	Enrichment	3
10:43-12:38	5	4	5	4	5
12:45-2:10	7	6	7	6	7

(week 2 is the opposite of week 1)

Schedule 3

Monday	Tuesday	Wednesday	Thursday	Friday
1	2	1	2	1
				2
3	Seminar	3	Seminar	3
				Advisor Base
5	6	5	6	5
				6
7	8	7	8	7
				8

Schedule 4

Monday	Tuesday	Wednesday	Thursday	Friday
1 7:15-8:10 55 minutes	1 7:15-8:35 80 minutes	1 7:15-7:55 40 minutes	1 7:15-8:35 80 minutes	2 7:15-8:35 80 minutes
2 8:15-9:05 50 minutes	2 8:45-10:00 75 minutes	2 8:00-8:40 40 minutes	3 8:45-10:00 75 minutes	3 8:45-10:00 75 minutes
3 9:10-10:00 50 minutes	5 lunch 10:05-11:55 75 minutes	TAPS/Clubs 8:45-9:15 30 minutes	4 lunch 10:05-11:30 50 minutes	4 lunch 10:05-11:30 50 minutes
4 lunch 10:05-11:55 75 minutes		3 9:20-10:00 40 minutes		5 11:35-12:50 75 minutes
5 12:00-12:50 50 minutes	6 12:00-12:50 50 minutes	4 lunch 10:05-11:55 75 minutes	6 12:30-1:20 50 minutes	6 12:30-1:20 50 minutes
6 1:00-2:15 75 minutes	7 1:00-2:15 75 minutes	6 12:00-1:15 75 minutes	7 1:00-2:15 75 minutes	7 1:25-2:15 50 minutes
		7 1:25-2:15 50 minutes		

Comparison of Features of the Four Sample Schedules

Schools choose from among schedules to meet different local school needs. The chart below uses a selection of extended-schedule advantages to compare the four sample schedules.

Advantages	Schedules			
	1	2	3	4
Allows students more time to prepare for each class	X	X	X	
Less time is lost moving from class to class	X	X	X	
Increase the number of credit opportunities over traditional 7-period schedule	X		X	
Allow long blocks of uninterrupted time for instruction	X	X	X	X
Provides a seminar or enrichment period for various activities which often pull students out of class		X	X	
Decreases number of students teachers must know each term	X			
Decreases number of teachers students adjust to each term	X			
Addresses questions of retention by decreasing gaps of time		X	X	X
Decreases number of classes teachers prepare for each term	X			

Available Research Findings

A search for existing research on extended-period schedules revealed a dearth of rigorous empirical studies. During the 1970s high schools across the country, including 25-30 in Minnesota, adopted schedules similar to the 4-period day. Only two school districts in Minnesota retained that schedule, and the schools provided little data about processes involved or outcomes realized by students.

Lowell Roisum, high school principal from Wadena-Deer Creek, Minnesota, one of the schools that has kept a 4-period day since 1972, said, during a December 1994 workshop presentation, that the teachers wanted to do something different and they did it to “revitalize the classroom.” Teachers work harder because they “can’t do the same thing for 90 minutes.” The schedule allows for expanded curriculum because “it’s really an 8-period schedule but kids don’t have to take 8 at once.” “Students believe that teachers care about them.” The schedule forces the teachers to think “less is more,” to think about “things you shouldn’t be doing,” and to

realize that sometimes “you don’t know what you are doing” until you are forced to think about it.

The literature review did turn up the following studies:

- In 1970 a Catholic high school reported using a 4-period day which provided additional curriculum for students, allowed time for ideas to settle, allowed more time for teacher preparation, and forced teachers into a variety of learning activities. (Ginther, 1970)
- In 1979 Manchester, Georgia, had a high school schedule with 2 ½ hour instructional blocks in each of three 12-week quarters. Manchester teachers and students found less scattering of student effort, more ease in meeting individual student needs, more supervised study for less advantaged students, and students take additional courses or retake a failed course without waiting a year. Other findings were that students stayed in school to take units beyond the minimum required, visits from former students increased noticeably, and teachers sensed a growth in responsible behavior. (Forehand and Watkins, 1979)
- A 1989 study of an alternative school-within-a-school found the block program especially good for high risk mobile students who could start over more often. Students completed more courses than they had the year before, grade point averages were higher, attendance improved, and the dropout rate was lower. Students noted that it helped concentration, retention, and reduced stress. Teachers knew students better and used twice as many teaching strategies in their block classes. (Munroe, 1989)
- A 1994 national study of high schools found that block schedules provided flexibility for varied instructional activities and enabled teachers to know their students better. When accompanied by interdisciplinary team planning it helped overcome the fragmentation of the school day and facilitate a more integrated curriculum. (Cawelty, 1994)
- A 1994 report of seven Copernican Plan high schools found a positive impact on student behavior, some improvement in attendance, significant improvement in dropout rates, improved teacher-student relationships, and more manageable workloads for both teachers and students. “It appears that students who know their teachers and feel a part of their classes tend to be less disruptive and to stay in school.” (Carroll, 1994, p.112)
- Blaine High School in Minnesota, after one year of block-scheduling in 1993-94, reported these findings: Average ACT and PSAT scores increased; the school’s grade point average and students on the honor roll stayed the same; the dropout rate dropped by 1.4%; students suspended dropped by 46%, from 740 to 400; and incidents of fighting went down from 64 incidents to 20 incidents.
- One often featured school is Central Park East Secondary School in East Harlem, New York City. With minority, low income students classified as special education, it operates under a simplified schedule with two 2-hour periods and two shorter periods, including lunch, per day. Central Park East has a dropout rate of 5% versus the citywide rate of 40%, and 90% of its graduates attend college. (Scherer, 1994)

With so few studies available, the findings described above must be considered preliminary even though it appears there are significant outcomes from use of the 4-period day schedule. Decreasing the number of students for teachers and the number of classes for students and teachers seems to improve behavior, attitude, and academic achievement of students. Students are more focused on the classes they do have, the teachers know the students better, and individual students' needs are better addressed. Teacher and student workloads are more manageable and therefore, stress is reduced. There is little evidence of change in classroom activities except that teachers purportedly use a greater variety of teaching strategies. Only when the change in schedule is accompanied by other changes does there appear evidence that other teaching and learning issues are addressed such as, curriculum fragmentation and integration.

Question and Answer

1. *Can students survive a class that lasts 85 minutes or more? Won't they become bored and tune out?* This would be true if teachers only lecture, but a longer period "kills the lecture method." Students say the schedule has forced the teachers to become more creative in the classroom (Willis, p.3). Because the longer period facilitates more engaging teaching techniques, students and teachers should find the day goes faster.

2. *Because there may be long gaps of time between a students' courses in the same subject – math, for example – won't students forget too much content in the interim?* Carroll (1987) cited research on retention which said "students remember best that which they really understand and can apply", "concentration of attention, and more immediate, concentrated feedback provides powerful reinforcement." (Carroll, 1987, p.11) Carroll asserts that "retention has not been a problem when the Copernican Plan has been put into practice" (Willis, p.3). Other anecdotal evidence is that though students with a longer gap between courses may need to catch up at the start of a term, the longer, concentrated class periods greatly shortens the catch-up time.

3. *Don't students who transfer from schools operating under traditional 6 or 7-period day schedules have a difficult transition?* Transfer in and out can be somewhat difficult, particularly in setting up a schedule for students, and different transition procedures must be developed. Credit conversion can be worked out, it is not insurmountable. An advantage for transfer students may be that they can get a fresh start at the semester and even at mid-semester in courses which earn a semester credit in one quarter.

4. *Will the parents and community support the 4-period schedule?* Schools thinking of changing should engage the parent and community in discussion of the change from the beginning. There may be some detractors because this is not how school was when parents were there. When the advantages and disadvantages are explored openly, parents and community members can be strong allies.

5. *Don't students, when returning from absences, have more difficulty making up ninety minutes than the traditional 55 minutes?* They may, but they only have 3 or 4 classes to make

up. Students should come to feel that good attendance in each class is more important. For those students who are chronically absent teachers and administrators will be able to intervene much sooner. It can also be viewed from another point of view – when students attend class they are in effect attending two classes.

6. *Does the schedule hurt departments with elective courses?* No, it helps because more courses are offered during the year in a 4-period day schedule such as Schedule 1 above.

7. *Won't students graduate early instead of taking extra classes?* Experience is that students don't choose to graduate early because they come to school for school activities and their friends. Most students choose to take more elective and/or more advanced classes.

8. *Can money be saved on textbooks if students are not all taking the same classes at the same time?* If the same courses are evenly spread throughout the year, the amount of money needed for textbooks decreases. Schools have found, however, that the amount of money used for film rental and video software increases. Teachers are able to more effectively use some of the high quality films and videos during the longer period.

9. *Will instructional methods have to change?* If a teacher is lecturing for an entire period under a 7-period day schedule something will have to change. Teachers should be encouraged and supported in exploring a variety of instructional methods. Research indicates that many methods of instruction are more effective than lecture. In-services and resources should be provided to introduce specific techniques that can be utilized in the classroom. Schools have a significant number of staff members whose expertise in this area can be tapped.

10. *How does an 85 minute block help those in lab-oriented classes like technology, art, and physical education?* Half as much time is consumed in showering and dressing, setting up experiments and taking them down, and cleaning up areas. All in one class period an activity can be introduced with a demonstration, lab activity completed by students, and the results of the lab discussed. In addition, tapping community resources for field trips or activities such as bowling and environmental observation are now more feasible.

Schools to Contact or Visit

Schools which are willing to be contacted for information or for on-site visits include:

Minnesota Schools

Lowell Roisum
Wadena-Deer Creek High School
600 Colfax Avenue SE
Wadena, MN 56482
218-631-2115
500 students, 9-12
(since 1972)

John Youngstrom
Winona Senior High School
901 Gilmore
Winona, MN 55987
507-454-9503
1400 students, 9-12
Note: will send people out and visits can begin
1995-96.

David Bonthuis, Principal
Champlin Park High School
6025 109th Ave N
Champlin Park, MN 55316-3475
763-493-8600
fax 763-493-8744
3500 students, 9-12

Ev Arnold, Principal
Bemidji Senior High School
201 15th St
Bemidji, MN 56601
218-759-3110
1600 students, 9-12

John Tefer, Principal
Blaine High School
12555 University Ave NE
Blaine, MN 55434-2199
763-422-5700
fax 763-422-5804
2800 students, 9-12

Mark Cushman, Connect-4
Coordinator
302 Washington Street
Monticello, MN 55362
763-295-5184
School-Within-A-School for 70 juniors and 70
seniors

Charles Briscoe, Principal
Willmar High School
2701 30th St NE
Wilmar, MN 56201
320-231-8310

Don Yrjo, Principal
Redwood Valley High School
100 George Ramseth Drive
Redwood Falls, MN 56283
507-644-3511
fax 507-644-3057
435 students, 9-12

Other States

8 block (4 per day) schools

Dr. John Laurie, Principal
Hillcrest High School
3319 North Grant
Springfield, MO 65803
417-833-9780
fax 417-833-0600
1000-1500 students, 9-12
Newsletter: "Networking News" about block
scheduling - \$10/year.

Edna Dougherty, Principal
Douglas County High School
2842 Front St
Castle Rock, CO 80104
303-688-3166
1350 students, 9-12

Jackie Provenzano, Principal
Wasson High School
2115 Afton Way
Colorado Springs, CO 80909
719-520-2900
fax 719-520-2966

4 block schools

Peter Klas, Principal
Gilmanton, WI 54773-0028
128 students, 7-12
715-946-3158
fax 715-946-3474

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