

HORACE

Using Time Well: Schedules in Essential Schools

Moving to longer schedule blocks can help schools focus more on depth in the curriculum and active student engagement. But unless teachers get substantial time to develop and reflect on new practices—and unless the needs of students drive the use of time—a long-block schedule won't accomplish much.

SUDDENLY THE SCHEDULE IS the hot topic in school reform. Frustrated by pressures to deepen student engagement and understanding, and fired by new techniques that cast them as coaches, not lecturers, more teachers than ever are protesting that they just don't have enough time in the day to do what's right in the classroom. Time to meet thoughtfully with their colleagues also comes dear, they say, just when professional development is more important than ever.

Little wonder that meeting halls at such gatherings as the National Association of Secondary School Principals (NASSP) convention are thronged with school people seeking answers through recasting their schedules. The 1994 government-sponsored report *Prisoners of Time* calls for radical reorganization of the school day to support increased learning by both students and teachers. A 1994 Educational Research Study named longer-block scheduling as one of seven primary indicators of major restructuring. And a move to longer-block schedules is sweeping the country, with surprisingly little resistance from even the most conservative camps.

Yet what of importance lies behind the move to reschedule schools? In a system long modeled after the factory or the monastery—where regulating time serves the purpose of social control as much as

learning—whose interests does the school schedule really reflect? If schools truly committed to becoming learning communities, not babysitting services or selection agencies for employers and colleges, how might their use of time alter?

"We must redesign education so that time becomes a factor supporting education, not a boundary marking its limits," the *Prisoners of Time* report asserts. In this view, might the school schedule free itself from its linear bonds and shape itself instead to students' learning needs and outcomes? If this invites a chaos too threatening to contemplate, the boldest Essential schools nonetheless are trying to find more resilient ways to organize their time so that it meets the needs of their particular students and teachers.

How We Regard School Time

In an era when American adolescents spend a lot more time working outside jobs or watching television than they do studying, the issue of time in school is entangled in several political, social, and financial scenarios. Most other countries, for example, place outside the "academic day" a host of school-related activities (including remediation, enrichment, and practical matters like driver education) that Americans fit into the standard six hours of school. Alarmed by rhetoric comparing U.S. education unfavorably to that in other nations,

more states are now moving toward requiring a heavier academic core, and extending the school day has emerged as a reform strategy that is controversial mostly because of its cost in teacher salaries.

But if teachers want to know students well enough to coach them long and hard in using their minds well, it may mean more than simply beefing up requirements within the conventions of the traditional school day. Instead, "school time" will have to deepen and strengthen the academic curriculum outside as well as inside the classroom, and provide ways for everyone to learn from each other all day long. The very idea goes to the heart of Essential School principles, and to the core of the school schedule problem; but experience proves it easier said than done.

School people tend to change their schedules for several reasons these days. Either they think longer class periods will push teachers

away from lectures and toward more student-centered classroom practices; or they have already adopted such practices and find they need more time to do them well. In some cases, as when teams of teachers share very long blocks with the same group of students, they are aiming to adapt time to the purposes of each day's work. Or sometimes, daunted by increased state requirements, schools turn to semester block scheduling merely to add an eighth course to the year's total, and so avoid sacrificing electives and vocational courses on the altar of core academics.

In almost every change, though, school schedulers are now looking to lengthened class periods for redemption from their woes. A host of "long-block schedules" has sprung up, each with their pros and cons, and schools with experience in trying them are flooded with visitors. Meanwhile, teachers and adminis-

trators have grown fluent in the scheduler's lingo of "double-blocks," "skinnies," and "common planning."

But whether the long block offers salvation or merely this decade's trendy placebo depends more on *why* than on *how* the day looks different. Unless the quality of student-teacher interchanges drives the schedule, it seems, schools will simply be putting the old wine of the shopping-mall high school into the new bottles of long blocks.

What are the Goals?

"When our school first began its work in the Coalition, Sherry King asked people not to use the schedule as the entry point," says Kathy Mason, who succeeded King in 1993 as principal of Croton-Harmon High School in New York's Hudson Valley. "Instead of tinkering with change, teachers were to look at what kind of teaching and learning they wanted, and then figure out

Basic "4 by 4" semester block schedule.

Students take four courses each semester for about 90 minutes a day; teachers teach three courses per semester. Some blocks are split into two 45-minute periods for lunch or short electives. Similar schedules are used at Noble High School (Berwick, ME); Coral Springs (FL) High School; and Reynoldsburg (OH) High School.

		Semester 1	Semester 2
P	1		
		Course 1	Course 5
E	2		
R	3		
		Course 2	Course 6
I	4		
O	5		
		Course 3	Course 7
D	6		
	7		
	8	Course 4	Course 8

Intensive foreign language acquisition using the "4 by 4" semester block schedule.

This shows how a student could experience a semester-long language immersion (perhaps including a foreign exchange) after taking an introductory language course the semester before. (Both schedules on page 2 reprinted from R. L. Canady, *Block Scheduling*, with permission.)

Blocks	Fall Semester	Spring Semester
Block 1 (90 min.)	Course 1	French 2-4
Block 2 (85 min.)	Course 2	
Lunch (35 min.)	Lunch	Lunch
Block 3 (90 min.)	Course 3	French 2-4
Block 4 (90 min.)	Course 4	

how to get it on a schedule." Today, Croton-Harmon is moving steadily toward longer blocks (see page 5), unafraid to keep shifting its schedule as it identifies new priorities. "This year all our seventh-grade teachers are meeting regularly to simulate how they would like to be working with the 'whole child,'" Mason says. "We've asked them to tell us what kind of schedule would best serve the best ideas they come up with."

Typically, schools move to longer blocks when they are seeking more depth in fewer "subjects," or want to integrate their studies by offering, say, humanities instead of English, art, and social studies. Long blocks make it easier for classes to practice applying knowledge via sustained projects, and they facilitate team-teaching. Long blocks bring down the number of students a teacher will have (at least during each semester and possibly for the whole year), which makes it easier to know every student well. Depending on the schedule, long blocks can offer more sustained planning time for teachers to work together. And in the very flexible long-block schedules most often used by middle schools, teams of teacher-

Three 100-minute classes a day on alternating days year-long.

This "extended schedule" at Gig Harbor High School near Tacoma, Washington also includes a 30-minute period four times a week for advisory teams and/or sustained silent reading (SSR). Teachers have 100 minutes of planning time every other day, and an extra half hour at the end of the day Friday, when students are dismissed early. Some team-taught integrated courses meet daily.

MON.	TUES.	WED.	THURS.	FRI.
Class 1 105 min.	Class 2 105 min.	Class 1 105 min.	Class 2 105 min.	Class 1 105 min.
Advis. Team	SSR	Advis. Team	SSR	Break
Break	Break	Break	Break	Class 3 100 min.
Class 3 100 min.	Class 4 100 min.	Class 3 100 min.	Class 4 100 min.	Lunch, 30 m.
Lunch, 30 m.	Lunch, 30 m.	Lunch, 30 m.	Lunch, 30 m.	Class 5 100 min.
Class 5 100 min.	Class 6 100 min.	Class 5 100 min.	Class 6 100 min.	Team Plng.

generalists can adapt day by day so as to shift groups of students without tracking, carry out special activities, and tailor what they teach to the times of day in which kids learn best.

Not When, but How

But most high schools are still wedded to the "course" as a unit of study, and so they organize their days into configurations of courses through which large numbers of students must progress in an orderly way to meet graduation requirements. (Central Park East Secondary School in New York City, where a comprehensive portfolio of student work provides the evidence for graduation, is a rare exception. Its long-block schedule and others are described in *HORACE*, Vol. 5, No. 4.) Leaving that premise intact, many schools interested in deepening student engagement turn their

energies toward devising a course schedule that gives more sustained time blocks for each class.

In Broward County, Florida, ten high schools voted to adopt a "four-by-four" semester block schedule in 1995 after teachers, district administrators, and parents spent a year investigating the alternatives. (See sidebar, page 2.) Now, many teachers at Fort Lauderdale High School have "traded in their desks for tables and started getting to know their kids better," says Fran Vandiver, the new principal there. At least three-quarters of the teachers from rescheduling schools showed up at voluntary summer workshops on teaching strategies for longer blocks. And many faculties, like Vandiver's, are continuing their exploration of new techniques in regular workshops and study groups scheduled into the school day.



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Trimester schedule with four long blocks daily.

Evergreen High School in Vancouver, Washington has three 12-week terms with four courses each, meeting 80 minutes a day, with 50 minutes for lunch, activities, and help. Teachers teach three classes a term and have one 80-minute prep daily. Class size increased by about two students per class; teachers see no more than 90 kids a term. Previously full-year courses now run two terms, not always consecutively unless they have highly sequential content like foreign language or higher math. Some teachers combine subject areas (world history and literature, biology and fitness, contemporary world problems and Spanish) or team-teach to keep the same students all year long.

"Both the students and the teachers like the 90-minute blocks," says Pat Ciabotti, the district's Essential School coordinator. She offers a sheaf of examples tailored to the schedules of everyone from an Advanced Placement student with extra music courses to a vocational student enrolled in algebra and Junior ROTC. Students take two "light-homework" and two "heavy-homework" subjects each semester. And though the system could mean that a student may go, for example, more than a year between the end of one math course and the beginning of the next, advocates argue that its depth and flexibility make up for it.

"A good schedule can help address existing problems such as the very high failure rate in ninth-grade algebra," says Robert Lynn Canady, a University of Virginia professor whose 1994 book, *Block Scheduling*, strongly influenced Broward County's leadership. "You can't expect all kids to reach the same point at the same time. But if you build extended learning time into your schedule, some can finish Algebra 1 in the first semester long block; some can go over for one or two quarters; and some can even take two years of algebra in one." Institutionalizing ways that students can succeed at challenging work at their own pace, Canady argues, will also reduce discipline, attendance, and motivation problems.

Even more important, he says, schools need to create ways that teachers can spend time with students *outside* the long class block. "I made it out of a tough childhood

because three or four teachers took extra time with me," he declares. "We've got to build that in to the schedule for kids who don't have the support system at home. Instead of talking about unmotivated kids, we should keep coaching them until they succeed, and reward them as they move in the right direction."

"Going to the long block is not an objective in itself," emphasizes Joseph Carroll, the author of the "Copernican Plan" for long-block scheduling. (See examples, page 6.) "My purpose is to allow a more manageable work load for both teachers and students, so as to strengthen the relationship between them." In a Copernican schedule, a teacher might teach two or three long classes daily and a student might take three complete courses each semester. "Add those numbers together—say, two plus three—and you get what I call the Copernican factor," Carroll says. "The lower it is, the better. In the conventional high school's six-period day, the factor is eleven—five for the teachers plus six for the kids."

Even though teachers and students change courses in midyear,

Carroll says, the quality of what goes on in class can improve in a long block to compensate. In the average 55-minute class, a 1984 study by E. H. Seifert and J. J. Beck has shown, instructional activities average only 28 minutes, with "transition activities" like roll call and homework assignment taking up the rest.

Shorter class periods also invite teachers to concentrate on recall and recognition of facts, which weather the test of time poorly, according to that research. (In a typical course, a 1993 study by G. B. Semb, J. A. Ellis, and J. Araujo showed, 30 percent of the teacher's time is spent reviewing material that should already have been mastered.) When they have more time to carry a lesson through its ideal stages—first introducing material, then coaching students to apply and synthesize their understandings, the likelihood that students will retain knowledge goes up substantially.

In any case, students who remember 85 percent of what they learned four months after a course retain 80 percent after eleven months, studies conducted for Carroll by the Harvard Graduate School of Education have shown. If teaching methods focus on understanding material, not just regurgitating it, the issue of retention can be addressed.

Teachers of mathematics and foreign language typically worry that their material requires more continuous time than long blocks in alternating semesters supply. Moreover, cautions John Backes, a University of North Dakota professor who sits

Six-period day on Monday and Friday and four 80-minute blocks on Tuesday through Thursday. Classes meet four days out of every five.

At Fairdale High School in Jefferson County, Kentucky, teachers see all their students every Monday and Friday, during which they introduce and review the work they will do during longer blocks on two out of the three midweek days. The schedule supports a schoolwide emphasis on using "open-ended questions," Socratic seminars, simulations, and cooperative learning techniques. Teachers have an 80-minute planning block twice during each week, and a 50-minute planning period Monday and Friday. In addition, a 25-minute advisory period called Teacher Guided Assistance (TGA) meets daily.

on his region's accreditation board, "Moving from a year-long 50-minute daily course to a semester-long 90-minute daily course reduces student contact time by anywhere from nine to thirteen percent, depending on the school calendar." Some schools intentionally keep students from accelerating math studies, Backes charges, so as to protect elective courses that could otherwise be squeezed out as state requirements increase for core academic subjects.

But schools that put student learning first can come up with imaginative ways to address the semester-long "gaps" in this kind of block scheduling. An intensive semester entirely devoted to foreign

language study, Canady suggests, could result in far more fluency than conventional course sequences. (See example, page 2.) Evergreen High School (schedule, page 4) teaches a social studies course in contemporary world problems entirely in Spanish. (Every student who took it last year scored 5 on the Advanced Placement Spanish test.) Math courses can be accelerated or extended to adapt to students' needs; independent research projects can ask students to apply concepts from a previous course; science and math can dovetail to create a spiral of integrated learning.

Altering the school calendar itself can prove another potent way

to give more time to learning. Many schools create shorter instructional terms to balance out long ones—75 days followed by 15, then 75 and 15 again, for instance. The interim terms can be used for remediation or enrichment, field experiences or intensive projects; and teachers can rotate through them for sustained periods of professional development.

Time for Teachers

In fact, without regularly scheduled time for teachers to improve their own practice, all the long blocks in the world won't change a thing for students. Learning new teaching strategies and continuously reflecting on and improving them takes a

8-day rotational schedule alternating long-block days and short-block days.

Croton-Harmon High School in Croton-on-Hudson, New York adopted this schedule as a first move toward longer blocks, to give teachers and students time to practice the skills and strategies of teaching and learning in longer periods. Each cycle accommodates a session of the Student-Faculty Congress, one advisory group meeting, a daily 35-minute "helping period," and a daily 40- or 45-minute lunch period.

TIME	Day A	Day B	Day C	Day D	Day E	Day F	Day G	Day H
8:13-8:55	1	2	1	2	3	4	3	4
8:58-9:38	2	3	8:13-9:35	8:13-9:35	4	1	8:13-9:25	8:13-9:25
9:41-10:21	3	4	3	4	1	2	1	2
10:24-11:04	4	1	9:41-11:01	9:41-11:01	2	3	9:30-10:40	9:30-10:40
11:07-11:47 11&12 Lunch C, D, G, H	5	6	5	6	7	8	7	8
11:50-12:30 11&12 Lunch A, B, E, F	6	7	11:07-2:27 ↑ 11:07-2:27 ↓	11:07-2:27 ↑ 11:07-2:27 ↓	8	5		
12:33-1:13 9&10 Lunch All Days	6	7	11:53-1:13 ↑ 11:53-1:13 ↓	11:53-1:13 ↑ 11:53-1:13 ↓	8	5	Lunch 12:00- 12:45 Everyone	Lunch 12:00- 12:45 Everyone
1:16-1:56	7	8	7	8	5	6	5	Seminars 12:50-1:24
1:59-2:39	8	5	1:19-2:39	1:19-2:39	6	7	Student- Faculty Congress	6 1:29-2:39
2:39-3:15								
H E L P I N G P E R I O D								

Three classes per semester, two semesters a year.

Several Coalition high schools use some variation of this schedule, (which resembles a "Copernican schedule") with three 95- to 100-minute blocks each day in two semesters. An additional 50- to 57-minute block is used for teacher planning or elective courses.

Robeson High School, Chicago. Three subjects per semester; three 100-minute classes a day, plus lunch. Teachers get half-hour morning prep period plus 50-minutes daily planning. Teachers can teach three classes one semester and two the next, or two plus a shared class with whomever they choose each term. Students take math and English for 100 minutes daily every term for two years, ideally completing all requirements in those fields by the end of tenth grade; they fit four years worth of required science as well as social studies (integrated with the arts) and electives into four years of long blocks.

Mt. Everett Regional High School, Sheffield, Massachusetts. Three 99-minute blocks daily, with a short 57-minute "interest course" (recently available for credit). Students take six courses a year plus short interest courses. Teachers have three 99-minute blocks plus 57 minutes prep daily during one semester; the other semester they teach two 99-minute blocks and a 57-minute "interest course" plus a 99-minute prep. Except for a new ninth-grade team, no common planning is scheduled.

Caledonia (MI) High School. Three 95-minute periods daily per semester, plus one 55-minute period, a 15-minute nutrition break for all, and a 30-minute lunch. An interim four-day "interdisciplinary learning experience" during second semester (February 28-March 3) may include expeditions, service learning, catch-up, or senior exhibition preparation. American Studies meets with English 11 all year with a team of teachers (English, music, two history teachers, one of whom coaches technology); World Studies for tenth graders meets for two 95-minute periods daily in one semester with a four-teacher team.

serious commitment of time. (See sidebar at right.)

Lynn Canady urges schools not to lengthen class periods without a minimum of five (and preferably ten) days of workshops preparing teachers in cooperative learning, Socratic seminars, and other techniques that work well in long blocks. Teachers particularly need to work with other teachers in their field who have been successful in longer classes, he says; and time to work across disciplinary boundaries is also valuable. Long blocks can be fertile ground for teachers working with heterogeneous groups, if they have the time to learn and practice new strategies.

Scheduling common teacher time into the school day also establishes a culture of professional development. The National Education Commission on Time and Learning calls on districts to make

this a priority in collective bargaining—not by sending students home early, but by extending the contract year, lengthening the day, or using a cadre of full-time, well-prepared substitute teachers.

Canady also suggests a slew of

possible formats for configuring schedules so teachers get regular time together. (See examples, page 7.) In some scenarios, teachers could schedule a half-day or full day of team planning at frequent intervals while other colleagues meet with a class for special projects that require unusually long hours. In others, some teachers are freed for five to fifteen days during mini-terms in which others teach intensive short courses.

Which teachers are freed by the schedule to work together also reflects the goals and priorities of a school. Some teachers meet in grade-level teams; others as a cross-grade group; others in disciplinary or cross-disciplinary groups; others as a whole. Michigan's Grass Lake district starts school two hours late every Wednesday morning so that all grade levels from kindergarten through twelfth grade can work together. At California's Piner High School, students spend a full morning each week in community service learning projects, while the staff works together.

"In-service is the real key to making longer class periods work," says principal Jan Reeder of Gig Harbor High School, near Tacoma, Washington. (See schedule, page 3.) "We did a full college-level course in cooperative learning, starting before school opened and continuing through the first part of the year.

How Much Time Do Teachers Need?

- In a recent survey of 178 principals in urban high schools undertaking major change efforts, lack of time, energy, and money were identified as the key implementation problems. On average, teachers devoted 70 days of time to implementing a project, while "the more successful schools used 50 days a year of external assistance for training, coaching, and capacity building."
- The staff of the Effective Schools Network reports that it takes 10 to 20 teacher days per month to develop and implement improvement plans.
- To learn a "moderately difficult teaching strategy could require that teachers receive 20 to 30 hours of instruction in its theory, 15 to 20 classroom demonstrations, and 10 to 15 coaching sessions before mastering the technique and incorporating it into routine classroom practice."

SOURCE: Purnell and Hill, *Time for Reform* (1992)

Then we used all our in-service time to work on instructional strategies that help in the long block."

"Eight weeks into our new schedule we had a follow-up workshop for teachers that we conducted as an 80-minute block, modeling techniques we could use right away," says teacher Jackie Powell at Fairdale High School in Jefferson County, Kentucky. "We survey teachers on what else they need—maybe a classroom management workshop—to be successful in long blocks." Last year Fairdale set its focus on open-ended questions, a priority in Kentucky's new performance assessments. "They require extra time to teach well in class," Powell says. "You can tell that long blocks have already contributed to more depth in our curriculum."

It's all too easy to bury oneself in the details of the schedule and forget the kids themselves. If we think hard about how they learn best, we must confront some uncomfortable truths. The clock does not direct or control learning, nor do the artificial cycles of terms and tests and report cards. In fact, sometimes those things—all integral to the very idea of a school schedule—often interrupt and impede the way kids learn.

"The simpler a high school schedule is, the better," asserts Ted Sizer. "Just because it's so complex, it must be solved as a matter between particular teachers and particular kids. Why not create a few long blocks, then keep all decisions about the 'bells and whistles' as close to the kids as possible? If I'm teaching

history and some students need to go to band, I would just keep on doing something special in class with the kids who don't go."

To create such conditions, schools might have to undergo a fundamental attitude shift. A learner's individual needs would matter more than the orderly processing of groups. The emotional investment of students in their work would matter more than what time they start and stop it, or where they carried it out. We would think of learning as continuous and connected, not delineated by bells, course boundaries, or exam dates. And everyone in a school community would be doing it all the time.

The essential question, then: What would the schedule look like in a school like this? □

Extended teacher planning blocks

in a 4 x 4 semester; half day on a 4-day cycle.

Teachers with Block 4 assigned for planning have no free block on Day 1, but have a half-day free on Day 4. This works best if no extra duties are assigned during lunch, at least on Day 1. (Reprinted from R. L. Canady, *Block Scheduling*, with permission.)

Extended teacher planning blocks

in a 4 x 4 semester; full day on a 4-day cycle.

This schedule not only gives teachers a full day for professional development, but allows one class a full day to pursue projects, field trips, and other activities that require longer time periods. (Reprinted from R. L. Canady, *Block Scheduling*, with permission.)

	Day 1	Day 2	Day 3	Day 4
Block 1 90 min.	Course 1	Course 2	Course 3	Course 4
Block 2 90 min.	Course 1	Course 2	Course 3	Course 4
L U N C H				
Block 3 90 min.	Course 2	Course 3	Course 4	Course 1
Block 4 90 min.	Course 3	Course 4	Course 1	Course 2

	Mon.	Tues.	Wed.	Thurs.	Fri.
Block 1	Course 1	Course 1	Course 2	Course 3	Course 4
Block 2	Course 2	Course 1	Course 2	Course 3	Course 4
L U N C H					
Block 3	Course 3	Course 1	Course 2	Course 3	Course 4
Block 4	Course 4	Course 1	Course 2	Course 3	Course 4

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