

A Cure for Fragmented Schedules in Elementary Schools

Improved test scores, more time for direct instruction, and a less fragmented school day are some of the benefits of parallel block scheduling.

If all teachers presently serving elementary schools were assigned as base or regular teachers, the pupil-teacher ratio would be very desirable indeed: 1 to 12 or 1 to 15. Since 1965 the number of teachers in elementary schools has increased substantially, but the additions have resulted primarily from the employment of special teachers for support programs; and the work loads of base teachers have not changed.

In fact, now that base teachers must plan their lessons around the schedules of pull-out programs, their responsibilities are compounded. With little control over which students will be taught by support teachers, how many will be taught, or when they will be taught, base teachers feel they just "direct traffic." This reality results in repeated interruptions, loss of instructional time, fragmented programs, and frustration expressed in comments like this:

I don't have one hour a day when I have all my students in my classroom together. Two or three are always assigned to some program—Chapter 1, talented and gifted, speech therapy, reading resource, or what-have-you.

Eliminating Fragmented Programs, Teacher Frustration

School personnel who use parallel

block scheduling, however, find that this plan can both accommodate pull-out programs and give teachers more instructional time. Under this plan, blocks of time are scheduled parallel to each other, with regular classroom lessons in one block and support services and extension activities in the other. All support activities, including pull-out programs, are scheduled within the parallel block.

The research on effective schools and effective teaching points to important conditions that this scheduling technique can achieve. For example, in her time-on-task research, Stallings reported that average academic learning time for students ranges from .6 to 1.5 hours per day.¹ Other researchers have reported that teacher-directed instruction varies greatly from teacher to teacher and from group to group.²

In addition, researchers have pointed out that teacher-directed instruction is critical for the success of low-achieving students, who typically receive less high quality direct instruction than do higher-achieving students.³ Further, low-achieving students receive more paper-and-pencil assignments and less interactive teaching.⁴ Parallel block scheduling makes it possible to give all students more direct instruction and time on

task, simply by reorganizing existing resources.

Planning a Parallel Block Schedule

In the beginning, the school day is divided into a morning schedule, a lunch period, and an afternoon schedule for all grade levels, in the way principals have typically proceeded. Suppose the school has a large Chapter 1 population, with one educably mentally handicapped class and two learning disabilities classes. Suppose a physical education teacher serves the school four days per week, and a special music teacher is there two days per week. Now the individual grade level schedules can be developed. Suppose, for example, the 3rd grade has 92 students, three base teachers, and one extension or support teacher. To develop the 3rd grade schedule, the principal and the teachers begin by determining the instructional level of each student and placing each in an appropriate instructional group, first, for reading/language arts (see fig. 1) and, similarly, for mathematics. (Grades K and 1 are scheduled as self-contained units, with specific periods of time designated for pull-out programs.)

Next, students are assigned to base or homeroom teachers. For example, as shown in Figure 2, Teacher A would have reading groups 1 and 4 for homeroom; Teacher B would be assigned groups 2 and 5; and Teacher C would have groups 3 and 6. Controlled heterogeneity in homerooms is ensured by placing *one low and one middle* or *one middle and one high* reading group with each teacher. The directed reading/language arts block would be scheduled as shown in Figure 2. Please

Reading Levels	2 ¹	2 ²	3 ¹	3 ²
Students Per Level	14	15	48	15
Students Per Reading Group	14	15	16 • 16 • 16	15
Reading Groups by Number	1	2	3 • 4 • 5	6

Fig. 1. Reading Groups for 3rd Grade (N = 92)

note that when each reading group receives its directed reading lesson every day, it is alone with the teacher, and the teacher is able to concentrate on the lesson for that group of students without supervising the seat-work of other students.

In first period, students in reading groups 1 and 4 meet as a combined group for instruction in writing, grammar, spelling, and penmanship. Teacher A provides whole class instruction for some language arts activities and differentiated assignments for the two groups at other times.

During second period, Teacher A instructs reading group 1, and students in group 4 are assigned to Teacher D in the extension center. Any reading group students requiring support services are scheduled within the parallel block and therefore do not report to the extension area. At the end of this period, the groups exchange, and Teacher A's students in reading group 1 go to the extension center or to support services, while students in reading group 4 go to Teacher A for a directed reading lesson.

Extension center activities during the reading/language arts block are designed to extend and enrich the language arts program, under the di-

rection of Teacher D. Students engage in sustained silent reading, writing activities, guided practice in reading, reading games, critical thinking and comprehension skills, and the like. Extension rooms may also provide word processor centers, listening centers, and content area reading centers.

Procedures similar to those described for reading are followed in assigning students to mathematics groups. During the afternoon schedule, base teachers provide direct instruction in math concepts and skills to each math group. Then, in math extension with Teacher D, the emphasis is on practice, drill, and computation. Typical activities include computer work, "newspaper math," skill sheets with pocket calculators to check work, manipulatives, and cooperative learning activities, such as the student team learning games developed at the Johns Hopkins University.⁵ Students not receiving direct instruction in math are assigned to the math extension center, to support services, or to physical education, music, or library classes. The math and physical education/music/library schedule for students in grade 3 is shown in Figure 3.

Following the afternoon schedule, as shown in Figure 3, students usually

return to their homeroom teachers for instruction in science, social studies, health, and art. Additional physical education also may be scheduled during this period. During this period, Teacher D can assist the base teachers and be scheduled for individual planning time.

This planning process is repeated for grades 2, 4, 5, and 6 (where necessary), with consultations with special teachers and homeroom teachers to smooth out any difficulties.

Reaping the Rewards

Both teachers and students benefit from parallel block scheduling.⁶ Each day students receive support services or pull-out programs without missing the teacher-directed instruction going on in their homerooms. All students receive instruction in reading and mathematics in skill groups without having peers from other groups observing their performance. Parents report that their children are no longer stigmatized as a result of the special services they receive or the levels of the basals they read.

Teachers profit by not having to run off—and students benefit by not having to fill out—the 1,000+ workbook and duplication sheets that most ele-

	Period I 8:40-9:30	Period II 9:30-10:20	Period III 10:20-11:10	Lunch 11:10-11:40
Teacher A	Reading Group 1 } Language Reading Group 4 } Arts	Reading Group 1—Directed Reading	Reading Group 4—Directed Reading	
Teacher B	Reading Group 5—Directed Reading	Reading Group 2 } Language Reading Group 5 } Arts	Reading Group 2—Directed Reading	
Teacher C	Reading Group 3—Directed Reading	Reading Group 6—Directed Reading	Reading Group 3 } Language Reading Group 6 } Arts	
Teacher D	The Parallel Block: Support Services and Extension Activities			
	Reading Group 2 Reading Group 6	Reading Group 3 Reading Group 4	Reading Group 1 Reading Group 5	

Fig. 2. 3rd Grade Morning Schedule with Parallel Block

mentary students are assigned each year for seatwork. Base teachers enjoy being able to spend over three hours per day in planning or in working with reduced size groups. The following two comments illustrate the satisfaction teachers experience with parallel block scheduling: "I had forgotten what teaching was like" and "It's great to have a group to teach without any students going or coming."

The ultimate payoff is that in schools where parallel block scheduling has been implemented for two or three years, the test scores of students in all ability groups, but particularly those in the lowest quartile, have improved. Higher test scores, enthusiastic parents, and teachers who are rekindling their original love of teaching—without needless interruptions—are strong testimony for a novel way of scheduling the school day that takes only a bit of innovative planning. □

1. Jane Stallings, "Allocated Academic Learning Time Revisited or Beyond Time on Task," *Educational Researcher* 9 (December 1980): 11-16.

2. Karl H. Clauset, Jr., and Alan K. Gaynor, "Improving Schools for Low Achieving Children: A System Dynamic Policy Study" (paper presented at the Annual Meeting of the American Educational Re-

search Association, New York, March 1982); also David C. Berliner, "The Half-Full Glass: A Review of Research on Teaching," in *Using What We Know About Teaching*, ed. Philip Hosford (Alexandria, Va.: Association for Supervision and Curriculum Development, 1984), p. 54. Others are cited by Berliner.

3. Wilbur Brookover et al., *School Social Systems and Student Achievement* (New York: Praeger Publishers, 1979), pp. 117-118; also Thomas L. Good and Jere E. Brophy, *Looking in Classrooms* (New York: Harper and Row, 1987), pp. 31-32.

4. Penelope L. Peterson, Louise V. Wilkinson, and Maureen Hallman, eds., *The Social Context of Instruction* (New York: Academic Press, Inc., 1984), pp. 26, 47; also Good and Brophy, *Looking in Classrooms*, pp. 128-130.

5. Robert E. Slavin, *Using Student Team Learning*, 3rd ed. (Baltimore: The Johns Hopkins University, The Team Learning Project, 1986).

6. For additional information on other types of scheduling plans that reduce problems associated with pull-out programs and increase teacher-directed instructional time in elementary and middle schools, see the following publications: Anne P. Sweet and Robert Lynn Canady, "Scheduling for a Differentiated Reading Program," *Reading Horizons* (Fall 1979): 36-41; Robert Lynn Canady, "Grouping and Time Management Strategies Designed to Improve Reading Instruction," *ESSAYS: Management Strategies for Improving Reading Instruction* (Monterey, Calif.: McGraw-Hill, Spring 1980); Robert Lynn Canady and Alfred R. Butler IV, "Designing a Middle School Schedule," *American Middle School Education* (Fall 1981): 29-35; Robert Lynn Canady and Jane R. McCullen, "Programming for Flexibility: Attack the Class Size Issue and Fragmented School Programs with These Scheduling Ideas," *AIGE Forum* (Spring 1981): 2-7; Robert Lynn Canady and Phyllis R. Hotchkiss, "School Improvement Without Additional Cost," *Phi Delta Kappan* (November 1984): 183-184; Robert Lynn Canady and Jane R. McCullen, "Elementary Scheduling Practices Designed to Support Programs for Gifted Students," *Roepfer Review* 7 (February 1985): 142-145; Robert Lynn Canady and Phyllis R. Hotchkiss, "Scheduling Practices and Policies Associated with Increased Achievement for Low Achieving Students," *Journal of Negro Education* 54, 3 (1985): 344-355.

7. Commission on Reading, *Becoming a Nation of Readers* (Washington, D.C.: The National Institute of Education, U.S. Department of Education, 1984), pp. 74-76.

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Period IV 11:40-12:10	Period V 12:15-12:45	Period VI 12:50-1:20	Period VII 1:25-2:30
Math Group 4	Math Group 1	Math Group 1 } Math Group 4 }	M—PE T—Music W—PE Th—Library F—PE
Math Group 2	Math Group 2 } Math Group 5 }	Math Group 5	Science Social Studies Health Art
Math Group 3 } Math Group 6 }	Math Group 6	Math Group 3	
The Parallel Block: Support Services and Extension Activities			
Math Group 1 Math Group 5	Math Group 3 Math Group 4	Math Group 2 Math Group 6	

Fig. 3. 3rd Grade Afternoon Schedule with Parallel Block

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