Picking up where A Nation at Risk and Goals 2000 leave off, the Commission concludes that the reform movement of the last decade is destined to founder unless it is able to harness more time for learning.

WHY WILL EDUCATION REFORM FAIL UNLESS TIME IS MANAGED DIFFERENTLY?

Unlike universities, where students take variable amounts of time to earn a given degree, American public schools have held time constant and let learning vary. The rule, only rarely voiced, is simple: learn what you can in the time we make available. It should surprise no one that some bright, hard-working students do reasonably well. Everyone else—from the typical student to the dropout—runs into trouble.

Our time-bound mentality has fooled us into believing that schools can educate all of the people all of the time in a school year of 180 six-hour days. The consequence of our self-deception has been to ask the impossible of our students. We expect them to learn as much as their counterparts abroad in only half the time.

For nine months of the year, schools generally open and close at fixed times such as 8 a.m. and 3 p.m., offering six 50-minute instruction periods, no matter how well or poorly students comprehend material. Graduation is based on attendance time rather than academic attainment, yet state regulations require a minimum of only 41 percent of secondary school time to be spent on core academic subjects.

Unyielding and relentless, the time available in a uniform six-hour day and a 180-day year is the unacknowledged design flaw in American education. The Commission identifies five false premises underlying the current management of time. First, students arrive at school ready to learn in the same way and on the same schedule. Second, academic time can be used for nonacademic purposes with no effect on learning. Third, yesterday's calendar can continue to serve students' needs despite enormous changes in society. Fourth, schools can be transformed without giving teachers the time they need to retool themselves and to reorganize their work. Fifth, students can deliver world-class academic performance within the time-bound system that is already failing them.

HOW ARE STUDENTS AND TEACHERS PRISONERS OF TIME?

The fixed clock and calendar is a fundamental design flaw that must be fixed. Students are caught in a time
trap-processed on an assembly line scheduled to the minute. Our usage of time virtually assures the failure of many students. The paradox is that, the more school tries to be fair in allocating time, the more unfair the consequences. If we genuinely intend to give every student an equal opportunity to reach high academic standards, we must understand that some students will need additional time. "Pull-out programs," while attractive in theory, in practice replace regular classroom time in the same subject. They provide a poor part-time solution to a serious full-time problem.

Academic time has been stolen to make room for a host of nonacademic activities. The traditional school day must now accommodate "the new work of the schools"—education about personal safety, consumer affairs, AIDS, conservation and energy, family life, driver's training—as well as traditional nonacademic activities such as counseling, gym, study halls, homeroom, and pep rallies. The school day is easily reduced to three hours of time for core academic instruction. Within a constrained school day, one can find the time for all these extra activities only by robbing Peter to pay Paul.

Today's school schedule must be modified to respond to the great changes that have reshaped American life outside school. By the year 2010, 40 percent of all children in the United States will belong to minority groups. The nation's big-city schools are already coping with a new generation of immigrant children, largely non-English-speaking, rivaling the size of the great European immigrations of the 19th and early 20th centuries. True, schools cannot be all things to all people—teachers cannot be parents, police officers, physicians, and/or employment counselors. But neither can they ignore massive problems. It is time to face the obvious. In many communities, when children are not with their families, the next best place for them is the school.

Educators do not have the time they need to do their job properly. Yet reallocating time collides directly with the forces of the status quo—entrenched school practices; rules and regulations; traditions of school decision-making; and collective bargaining. The greatest resistance of all is found in the conviction that the only valid use of teachers' time is "in front of the class"; the assumption that reading, planning, collaboration with other teachers, and professional development are somehow a waste of time. Adding school reform to the list of things schools must accomplish, without recognizing that time in the current calendar is a very limited resource, trivializes the effort. It sends a powerful message to teachers: don't take this reform business too seriously. Squeeze it in in your own time.

Mastering world-class standards will require more time for almost all students. The National Education Goals (Goals 2000) center on higher achievement by American students. In discipline after discipline, witnesses told the Commission that improvement in achievement cannot be realized without more instructional time. In sum, if the United States is to grasp the larger educational ambitions for which it is reaching, we must strike the shackles of time from our schools.

WHAT CAN WE LEARN FROM SCHOOLS ABROAD?

Students in other post-industrial democracies receive twice as much instruction in core academic areas during high school. Here are the estimates for required core academic hours during the final four years: United States, 1460; Japan, 3170; France, 3280; Germany, 3528. In practical terms, this means that most foreign students are studying language, literature, science, or two or more languages while many of our young people spend their time in study halls, pep rallies, driver education, and assemblies.

Schools abroad protect academic time by distinguishing between the "academic day" and the "school day." In Germany and Japan, learning is serious business. "Academic time" is rarely touched. In the United States, conversely, students earn a high school diploma if they devote as little as 41 percent of their school time to core academic work.

Many of our economic competitors supplement formal education with significant out-of-school learning time. In Japan, parents spend over $7 billion annually on private tutorial instruction (juku). In Europe, half of the students do two or more hours of homework a day but only seven percent watch five hours of television; in the United States, only 29 percent do that much homework, while 20 percent watch that much television.

School performance abroad has consequences and is closely related to opportunities for employment and further
education. Apart from the small percentage of students interested in highly selective colleges and universities, most students understand that possession of even a mediocre high school diploma is enough to get them into some kind of college or job. Conversely, in Germany and Japan, students must pass demanding competitive examinations for admission to universities.

Teachers in other countries enjoy freedom and respect as professionals. Japanese teachers generally spend only 20 hours a week in front of classes, and Germans 21 to 24 hours. The rest of their work weeks-in Germany, 38 hours-are devoted to preparation, grading, in-service education, and consulting with colleagues. In Germany, teachers are held to high standards and treated as professionals.

WHAT KINDS OF INNOVATIVE SCHEDULES ARE BEING IMPLEMENTED BY SCHOOLS WITH HIGH MINORITY ENROLLMENTS?

The extended year, extended day model. One urban elementary school with two-thirds minority enrollment stays open for 11 months a year. Students attend 205 days, and teachers work 226. School sessions run 10 weeks, followed by a week of teacher training and planning. "You don't get well-developed professionals with two inservice days a year," says the Principal of New Stanley Elementary School in Kansas City, Kansas. Teachers and students are grouped together for three years. To meet the needs of working parents, the school offers before- and after-school programs such as day care, tutoring and enrichment, recreation, and breakfasts.

The extended year, multitrack model. An elementary school with 800 students from 20 linguistic and cultural backgrounds operates essentially year-round. Alternating between 12 weeks on and three weeks off, the school closes only for one three-week interval in July. During the three-week breaks, the school offers special programs to provide remedial or enrichment classes for about 150 students. To meet the needs of its diverse student population, Emerson Elementary in Albuquerque, New Mexico, has developed a special focus on school readiness. It operates a child development center for about 40 preschool children, emphasizing parent participation.

RECOMMENDATIONS

Reinvent schools around learning, not time. There is no point to adding more time to today's schools if it is used in the same way. We must use time in new, different, and better ways. The Commission believes that students should master the following common core subjects: English and language arts, mathematics, science, civics, history, geography, the arts, and foreign languages. American students can meet this core set of expectations just as students abroad do.

Fix the design flaw: use time in new and better ways. New uses of time should ensure that schools rely less on the 50-minute period, after which teachers and students drop everything to rush off to the next class. Block scheduling-the use of two or more periods for extended exploration of complex topics or for science laboratories-could also permit American schools to follow international practice-between classes, students remain in the room and teachers come to them.

Grouping children by age should become a thing of the past. It makes no more sense to put a computer-literate second grader in Introduction to Computers than it does to place a recent Hispanic immigrant in Introductory Spanish. The dimensions of time in the learning process extend far beyond whether one student needs more time and another can do with less. Flexible use of time can permit more individualized instruction.

Establish an academic day. Even within the confines of the 180-day academic year, reclaiming the academic day should, alone, nearly double the amount of instructional time in core curriculum areas. What this means is obvious: many worthwhile student programs-athletics, clubs, and other activities-will have to be sacrificed unless the school day is lengthened. The Commission does not believe they should be sacrificed, or that communities will agree to do without them. Instead, all student activities should be offered during a longer school day.

Compensatory programs and special efforts for the gifted and talented can be provided during the longer school day. Language instruction for non-native English speakers should be provided in this longer day.

Keep schools open longer to meet the needs of children and communities. The documented need for child care
can no longer be ignored. No single agency can meet all of the needs of today's families, nor can any major public agency ignore them. Extended services that offer safe havens for children in troubled neighborhoods are a logical solution to the child care problem, which does not go away when schools close for the summer. Without such services, it is unlikely that the first of the National Education Goals, "school readiness," can be achieved.

**Give teachers the time they need.** The whole question of teachers and time needs to be rethought in a serious and systematic way. The real issue is education quality. Teachers need time to develop effective lessons, assess students, talk to them, confer with parents, read professional journals, interact with colleagues, and watch demonstrations of new strategies. Yet the last thing districts should encourage is sending children home to provide time for "teacher professional days." We will never have truly effective schools while teachers' needs are met at the expense of students' learning time.

**Invest in technology.** Technology makes it possible for today's schools to escape the assembly-line mentality of the "factory model" school. With emerging hardware and software, educators can personalize learning and students can move at their own pace. The school revolution depends both on a concerted investment strategy to help educators obtain education technologies and on educators confronting their reluctance to supplement the techniques of the 19th century with those of the 21st century-CD-ROMs, modems, and fiber optics.

**Develop local action plans to transform schools.** Larger school districts can offer families a wide array of alternative school calendars by encouraging individual schools to adopt distinctive approaches. The more options, the better. No single configuration will satisfy every need. Districts of any size, with a sense of vision, boldness, and entrepreneurship can experiment with block scheduling, team teaching, longer days and years, and extending time with new distance-learning technologies. School boards should devote their time to policy, goals, and the educational needs of children, not the micromanagement of school operations.

**Share the responsibility: finger pointing and evasion must end.** Where there should be a shared sense of common purpose among school, family, and community, too often we find a circle of blame. Parents blame the community for the child's problems. Communities blame the schools. And the school, too frequently, blames both. Then it closes itself off in its time-bound world.

**Government should focus on results, not red tape.** The Commission applauds states such as Kentucky and Washington that have adopted comprehensive reform efforts, most of which promise (1) to limit regulatory oversight in return for demonstrated results in the schools; (2) to offer additional time for teachers' professional development; and (3) to provide sanctions and rewards for schools based on performance.

**Higher education needs to get involved.** Higher education already offers a model that holds learning fixed and makes time a variable. The school reform movement cannot succeed unless academic institutions honor the results of new standards and assessments. Also, colleges and universities educating teachers must align their programs with the movement to higher standards.

**The business world should keep up the pressure.** Much of the impetus for school reform has been generated by business leaders insisting that changes in the workplace require radically different kinds of school graduates.

**Parents, students, and teacher must lead the way.** To parents, grandparents, relatives, and guardians, the Commission says, without your support, we do not know how the agenda for reform can be achieved. To teachers, it says, if you accept minimal effort from students or colleagues or excuse shoddy performance, then you have fallen short, no matter how understandable your reasons. To students, it says, it is your job to become the "worker" in your education. Your success depends primarily on your own diligence.

**REFERENCES**

Time Management and Educational Reform