All Time Is Not Equal:
Factors to Consider When Implementing Innovative Uses of Time

The public school day and school year are essentially the same today as they were 50 or even 100 years ago, with some variations in individual schools and districts. Recently, however, pressures to improve our education system while limiting new expenditures have led to experiments and research aimed at increasing school productivity—including innovative uses of school time. Extended school years, year-round school, and block scheduling are educational restructuring tools currently being implemented in schools across the country. They have been introduced in an attempt to break education out of the box imposed by traditional time schedules dictated by a bygone agrarian culture and to maximize the efficient use of school facilities and the school day.

However, these policy and programmatic changes in school time raise several issues for educators and policymakers. First, it must be recognized that the pressure to innovate and maximize school time is confounded by the reality that teachers’ time is increasingly being stretched as districts strive to implement new standards and assessments that necessitate substantive professional development activities and planning time. Second, it is important to recognize the difference between simply adding more time to a school period, day, or year and, on the other hand, promoting the more effective use of time. This brief summarizes the basic research on school time, the different concepts of time and their relation to learning, and then offers several implications related to the changing use of school time that policymakers and administrators should consider.

Research on Time and Learning

Three decades of research on school time has attempted to determine if: 1) schools can make better use of the school day and 2) students should attend school for longer or different allocations of time. While individual schools have increased performance by modifying their use of time, research has demonstrated that more time in and of itself does not necessarily correlate with increases in student performance. Rather, it is effective use of time that is key to increasing student performance. This becomes more clear when looking at the four basic types of classroom time: 1) allocated time, 2) instructional time, 3) engaged time or time-on-task, and 4) academic learning time. These four gradations of time create a conceptual continuum whereby the more sensitive the measurement is to actual time spent learning, the greater the correlation to student achievement.

★ Allocated time is the crudest and most common measure of school time in the continuum. Allocated time is simply the amount of time students attend school. Allocated time reflects society’s education priorities as exemplified by typical high school graduation requirement that call for 4 units of English and mathematics and 1 unit of music or art. Allocated time is the only time regulated by state or local education authorities.

★ Instructional time is a slightly more precise measure of school time, because it reflects the amount of allocated time dedicated to instructional versus non-instructional activities. Examples of non-instructional activities are: lunch, study hall or class transitions. Factors that increase the difference between allocated and instructional time for individual students are absenteeism and pull-out programs.

★ Engaged time or time-on-task is the amount of instructional time actually engaged in learning. As the type of time becomes more sensitive and sophisticated, its measurement becomes more difficult. Allocated and instructional time are relatively easy to document based upon schedules and easily observable practices. Engaged time can only be effectively assessed by trained observers. Engaged time is primarily dictated by an individual teacher’s ability to manage a classroom and deliver quality, engaging instruction. However, distractions such as intercom announcements, fire drills, and students entering and exiting classrooms for various pull-out programs can decrease engaged time and are typically out of the control of individual classroom teachers.

★ Academic learning time (ALT) is the amount of allocated time that is actually spent engaged and is meaningful to the student based upon their abilities. ALT is the most sophisticated measure of classroom time in that it incorporates allocated, instructional, and engaged time and individual learning aptitudes. It is the only measure of time that is sensitive to individual student learning objectives, styles, and
abilities. ALT is the most highly correlated predictor of student learning in the time continuum and, predictably, the most difficult to assess and facilitate.

The idea of increasing school time to improve student learning makes intuitive sense. However, all time is not equal and use of allocated time as a proxy for more precise measures of the meaning of classroom time will cause time to continue to be an unreliable predictor of student learning. The majority of scheduling reform efforts (i.e., block schedules, extended school year and year-round schools) have focused upon changing the allocated time within schools. Implementing alternative school or class schedules may affect a variety of factors such as discipline, student outcomes, student-teacher relationships and facilities usage, but in and of themselves, there is no guarantee. However, careful attention to how time is used as a means to change rather than an end itself will increase the likelihood that new initiatives such as block schedules or extended school years may have a positive effect on student learning.

Issues to Consider When Contemplating a Change in State or District Policies Pertaining to School Time

- Policymakers and educators should understand the reason behind the schedule change. Is it to accommodate population growth or improve student learning? Does the change actually correlate with the goal?

- Does the policy change provide guidance and information about best educational practices while allowing individual districts to implement schedule reforms in light of their unique community needs? In the case of a longer school year, for example, a shift in the state requirement may be most attractive if the mandate to add 1 or 2 days per year is made by the state, but the local districts are allowed to decide where to add the extra day(s).

- Policymakers should carefully consider the kind of time being manipulated in a particular reform (such as increased school year and school day) when contemplating policy changes. Investing significant resources to simply increase allocated time is far less effective than investing in increases of engaged time.

- Change requires training and retraining. Adopting a block schedule, for example, requires providing teachers with professional development to support teaching in 90-versus 50-minute periods. In one school studied, a teacher reported that the new longer periods were better because the teacher could spend the first hour presenting the lesson and the last 30 minutes supervising students working on their homework. While teacher-guided homework may be of value, the bottom line is that the teacher did not change instructional methods to fully utilize the longer periods for engaging lessons. Anecdotal evidence from other schools and districts has shown that this is not atypical in schools that shift to block schedules without appropriate staff development.

- States can take a number of steps to promote professional development in innovative use of learning time. For example, states can provide funding for grants that support the development and implementation of workshops on effective use of learning time. State department staff can offer sessions on teaching in block schedules at state professional association conferences. States can contract with teachers to develop model lesson plans featuring innovative uses of time; plans can be disseminated along with general guidebook for teachers, as well as be posted on the department of education’s web site. States can also work to ensure that teacher training institutions offer units on effective use of time that will better prepare new teachers for longer class periods or other changes in the use of school time.

- Finally, any plan to implement changes in the structure of school time should include sufficient resources to develop an evaluation plan that includes gathering baseline data and measuring the effect of the change over an appropriate period, typically 3 - 5 years. If a school district shifts to block scheduling to improve student learning, but after three years finds that no significant improvements have occurred, the cost of operating under a block schedule should be critically analyzed in light of the outcomes.

Resources Related to School Time

http://carei.coled.umn.edu/bsmain.htm—web site dedicated to information about block scheduling reform initiatives

