

EDUCATION POLICY WHITE PAPER

President Barack Obama recently called for investing in effective after-school programs, summer school, and adding days to the school year in order to increase the amount of time American children spend learning. He is not alone in wanting to extend the opportunity for children to learn. Opinion polls show broad public support for providing children with more time to learn, both inside and outside of school. Ninety-six percent of the respondents in the 2007 Phi Delta Kappa/Gallup poll, which surveyed members of the public, agreed that providing "more instructional time and other help for lowperforming students" is an effective way to close the achievement gap between low- and high-achieving public school students. An earlier poll commissioned by the Afterschool Alliance found that 88% of the public wanted to have comprehensive, daily after-school programs offered in their community. Moreover, 77% of those polled said they were in favor of the federal government funding the programs.

Private foundations, think tanks, advocacy groups, and support agencies also back such efforts. In recent years, at least 13 states and several major cities have mounted major initiatives to increase in- and out-of-school learning opportunities for students. Prominent education organizations such as the Council of Chief State School Officers, the American Association of School Administrators, and the National Association of Secondary School Principals have also launched efforts to explore and support these initiatives. And, the federal government already has more than 100 programs that provide financial support for increasing the length of the school day and year and for after-school and summer school programs.

Still, the majority of school- and community-based programs that extend learning opportunities depend on *multiple* sources of funding, and sustaining such programs over the long run has become a major challenge. In fact, the majority of organizations providing extended learning opportunities rely heavily on user fees to sustain them. However, these fees create barriers to participation

Time for Learning Education Policy White Paper

Brian Rowan, *Editor* School of Education, University of Michigan

National Academy of Education Working Group on Time for Learning:

Brian Rowan (Chair), School of Education, University of Michigan

David Berliner, Fulton Institute and Graduate School of Education, Arizona State University

Harris Cooper, Department of Psychology and Neuroscience, Duke University

Jacquelynne Eccles, Department of Psychology, University of Michigan

Henry Levin, Teachers College, Columbia University

(especially for lower-income families), which in turn discourages the location of programs in economically disadvantaged communities because providers cannot count on receiving sufficient funds to support them.² The quality of the programs offered also varies widely and, although some organized out-of-school activities can enhance learning, many do not.

Is further investment in extended learning time warranted? Increasing the amount of time children spend in school would require a significant investment. Even with the additional money made available to schools through the American Recovery and Reinvestment Act, school budgets will be tight. A long line of research shows that simply adding minutes to the time spent in class on reading or on mathematics, or tacking on a few more days to the school calendar, have little effect on student achievement. In fact, researchers have found that every 10% increase in school time can be expected to produce only a 2% increase in learning.³ Of course, those estimates are based on making no changes in how the additional time is used. Other research shows that when the

additional time is part of an overall strategy for improving school performance that includes significantly better instruction, powerful gains can be made in student achievement.⁴

Policy makers should think of the time available for learning as a resource, just as they consider financial support, instructional materials, and teacher expertise to be essential resources for learning. As with all resources, learning time needs to be well-used to be of benefit.

The recommendations here concern federal policy initiatives. They are intended to stimulate and support efforts by state and local governments, business interests, and philanthropies to extend in-school and out-of-school learning opportunities for students from kindergarten through grade 12. These recommendations reflect current research findings; where the research evidence is suggestive rather than definitive regarding practices or program characteristics, we recommend federal support for pilot programs designed to gather better evidence.

RECOMMENDATION 1: Identify, support, and test promising policies to increase the enrollment and regular attendance of disadvantaged students in summer school programs.

Decades of research show that the pace of learning slows for all students during the summer, but that the rate of the learning loss is affected by socio-economic status (SES) and other factors, with children from middle-class families continuing to learn school-relevant material at a greater rate than children in lower SES families. Moreover, data from the same sources suggest that rates of academic learning for all students—regardless of their economic status—are about the same when school is in session. It follows from these findings, then, that expanding the access of disadvantaged students to summer learning opportunities is one way to close the achievement gap. However, closing this gap in academic learning would require those students to attend multiple years of summer school.

Summer programs can be designed for various purposes. Some summer programs focus on remediation, helping children who are lagging behind to catch up. Others offer a second chance for older students who failed a class they need to pass to be promoted to the next grade or for graduation. Summer school can also provide extra help for children with learning disabilities. Other programs give successful students the opportunity to accelerate their learning, enabling them to graduate early from high

school. Students can also study subjects more deeply or study subjects that may not be taught during the regular school year, such as computer programming, math, science, or engineering. These enrichment programs are often conducted on college campuses or by museums, performing arts organizations, and other groups.

A recent review of 93 evaluations of summer school programs showed that it did not matter whether the focus was on remediation, accelerating students' learning, or enrichment—each has been shown to have positive effects on students' knowledge and skills. However, the effects of the programs on student outcomes depended on how they were designed. In general, those that featured smaller class sizes, more one-to-one tutoring or individualized instruction, and required some form of parent involvement were more effective.

The remedial programs that worked best had some additional characteristics. The programs were the result of careful planning undertaken well before the start of the summer period, they were staffed by teachers who worked at the school, and the summer curriculum was intentionally and carefully aligned with the school curriculum. When students participate over a period of years, and show up consistently, the effect of summer remedial programs can be considerable, with students making cumulative gains of up to 40% to 50% of a grade level on standardized tests after 3 years.

Low-income parents are enthusiastic about summer school, but many low-income parents cannot enroll their children if they have to pay for them to attend. Transportation costs can also be a barrier, as can the cost of children's lunches and snacks while they are participating. The problem of weak or inconsistent attendance, especially in low-income communities, is pervasive. So, it's not enough just to make sure that good programs are available in targeted communities. Strategies must also be devised to encourage regular attendance, ideally over several years. It is unclear from research how best to do this

We recommend that the federal government support experiments to identify the characteristics of programs that succeed in keeping students engaged, especially those in economically disadvantaged communities. In addition, experiments should be conducted that use a variety of incentives—financial and otherwise—designed to reward regular attendance (non-cash incentives could include, for example, t-shirts, movie tickets, discounts at shops, a pizza party, the opportunity to participate in a special field trip, etc.). ¹⁰ If successful in increasing regu-

lar attendance, such incentives could produce academic gains that are well worth the costs.

RECOMMENDATION 2: Working together, federal and state governments, business groups, and philanthropies should fund efforts to develop models of after-school programs that can be successfully implemented in various settings. The models and their components should be the focus of experiments to determine their effectiveness.

American parents today are working longer hours. 11 A consequence of this is that about a quarter of the children and youth in this country now spend several hours each day after school—and up to 13 weeks each summer—with little direct adult supervision. 12 One way to increase learning opportunities for children (particularly for those who are at risk of failing school) is to look beyond the regular school day. For this reason, education policy analysts want to increase the learning opportunities available for students at risk outside the regular school day and calendar.

A growing body of research suggests that participating in a diverse array of after-school activities such as sports, lessons, clubs, and the like, is associated with a number of positive developmental outcomes for children and youth.¹³ These are the kinds of activities that middle-and upper-class families can afford. But it is not clear from the research exactly which kinds of activities should be publicly supported as a strategy to increase school achievement.

Children and youth in the United States spend, on average, more than 20 hours per week watching television, playing games, and hanging out; about 4 to 6 hours on homework, studying, or tutoring; and about 4 to 6 hours in organized activities such as clubs, sports, or other after-school programs. But, how children spend their time out of school varies in significant ways by age, sex, socio-economic status, and ethnicity. Both Black and White children from families of higher socio-economic status spend more time engaged in educational and organized activities than children from low-income families.

Unfortunately, students most at-risk of failure are least likely to participate in out-of-school learning activities. That should not come as a surprise. High-quality enrichment activities such as music lessons or tutoring are less available in low-income neighborhoods, where many parents are unable to pay for their children to par-

ticipate. ¹⁴ Correlational studies show that students who spend more time engaged in organized out-of-school activities do better in school, but these findings could be due to selection bias (i.e., students who participate in these programs may be those who were already more likely to do better academically). ¹⁵ More persuasive evidence comes from a recent review of 35 evaluations of academically focused out-of-school programs for at-risk youth. In this review, students who enrolled in these 35 programs, on average, showed improved performance in reading and in mathematics. However, the programs varied greatly in their effectiveness, with the more effective programs being more likely to serve the early elementary and high school grades and to include a tutoring component. ¹⁶

Other studies have looked at youth-serving organizations with aims beyond simply improving school performance. These organizations want to promote better grades, but also help students set more ambitious educational goals, improve their self-image, develop socially, and reduce risk-taking behavior, as well as behave better in school and be absent less frequently. A review of research on these kinds of organizations showed that such programs had highly variable effects on developmental outcomes, with the average effect across the programs under study being near zero. ¹⁷ But, this "average" effect masked considerable program-to-program variability, and the review did identify several effective programs.

There are two likely explanations for this variability. One is that not all programs offer features that have been found to be associated with success. Research suggests that programs have a larger impact on student development when they provide children and youth with personal attention from caring adults, and when they include opportunities for participants to explore new interests, gain real skills, receive academic support, develop a sense of belonging to a group, and form new friendships with their peers. Programs that allow participants to take on leadership roles and build a greater sense of selfesteem apart from their academic performance have also been found to be more effective. A second reason for the variability of the findings is that, in some cases, the rate at which students participate in programs is low because some families cannot pay the participant fees or, as with summer school, the students do not attend regularly. 18

Although some effective after-school programs have been identified, the research evidence supporting increased investment in them is less persuasive than it is for summer school. A series of experimental effectiveness trials aimed at identifying the specific program features that produce positive results is now needed. These trials should study the effect of various features on academic performance, the strength of the bond between students and their school, and whether students continue to attend and complete the programs themselves (especially adolescents, for whom this can be a problem).

One federal funding effort that merits further study is the 21st Century Community Learning Centers initiative. 19 About 15% of all participants enrolled in after-school programs attend these centers, which particularly serve students from high-poverty communities and lowperforming schools. The latest federal performance report showed that nearly all of the centers offered some high-quality enrichment opportunities and other support services. Center teachers reported that about threequarters of the participating students were turning in more homework and about the same proportion improved their behavior. ²⁰ But the same report showed that in 2007 only 41% of students improved in mathematics and only 43% improved in English between fall and the following spring. Those results were below the performance goal set by the government.²¹ Moreover, an independent, federally funded program evaluation did not show positive effects of program participation on student achievement among elementary school students and showed only mixed positive effects on other developmental outcomes.²²

Given the program's popularity and the mixed evaluation findings, we recommend that the federal government make it a priority to find ways to increase its effectiveness in improving academic outcomes. Other promising programs—developed by states, not-for-profit organizations, for-profit organizations, community agencies should be studied looking at the same outcomes as the 21st Century Learning Centers, which include academic performance, homework completion, and behavior. The studies should be structured as experiments so as to yield findings about the effectiveness of specific elements of each program. The purpose of these studies should be to determine which program elements are most likely to improve student outcomes. The parts of the programs determined to be effective should then guide policy makers, philanthropies, and businesses that want to invest in increasing the number of high-quality afterschool programs.

RECOMMENDATION 3: Working with private business and philanthropic groups, the federal government should fund experiments to determine whether and how greatly expanded school time can increase student achievement and produce other positive outcomes.

The amount of time U.S. students spend in school varies by state, district, and grade level, but it is reasonable to assume that the average is about 6.5 hours per day, for 180 days—a total of about 1,170 hours per year—an amount that is not out of line with international norms. ²³ Instructional time also seems to be equitably distributed. Economically disadvantaged and minority students actually receive slightly more instructional hours than do their more economically advantaged peers. ²⁴

Data from international assessments show that the amount of time U.S. schools spend each day on core subjects such as reading and mathematics is about the same as the average time spent by other countries. Although it is commonly believed that national systems of education that allocate more time to instruction have higher test scores on international assessments, international assessment data do not, on average, support that conclusion. Indeed, variability in time allocations account for less than 1% of the cross-national variance in student achievement scores. In fact, students in Finland, which is one of the highest scoring countries according to the Organisation of Economic Co-operation and Development (OECD), actually attend school fewer hours than do students in the United States.

Given the broad public support for extending the school day, the federal government, working with private business groups and philanthropies, can play a significant role in encouraging experimentation with alternative school calendars. As noted earlier, marginal increases in instructional time will not yield proportionately greater student learning unless the quality of instruction is also improved. In this regard, one key difference in the use of school time in high-achieving nations, in contrast to the United States, is the amount of in-school time used for teacher planning and professional development. In European and Asian nations with strong student performance. teachers spend about 15 to 25 hours per week—between 40% and 60% of their total work time—collaborating on curriculum development, lesson study, action research on instructional outcomes, and professional development. By contrast, U.S. teachers typically receive only about 3 to 5 hours weekly in which to plan by themselves, with little opportunity to share knowledge or to improve their practice.

U.S. teachers have less shared planning time and more net teaching time—nearly 1,100 hours per year—than teachers in any other OECD country, far greater than the OECD average of 660 hours per year for upper secondary schools and 800 hours per year for primary schools.²⁷ The amount of teaching time in countries like Korea and Japan is even lower at the secondary level,

giving teachers more time and more opportunity to develop sophisticated practice. Experiments with increasing time should include investigations into alternative uses of time for high-leverage teacher collaboration around curriculum and instruction that should translate into improvements in the quality of students' instructional time.

Although small amounts of added time do not make a significant difference in student performance and learning, it's possible that greater increases in time do. Little is known about the effects on student learning from *significant* increases in instructional time that are also accompanied by improvements in curricular and instructional programming. There are several major initiatives that take this approach that can be studied to determine what programmatic features contribute to improved student performance and whether they are worth widespread replication.

The longest-established program that dramatically increases student time is the Knowledge Is Power Program (KIPP), a national network of 45 middle schools where students spend about 60% more time in school than their peers in conventional middle schools. The additional time is part of an overall approach to education that makes students and their teachers work harder. The program also requires students to participate in non-academic activities that are meant to build self-confidence, develop work skills, and increase students' commitment to school.

Research on KIPP schools suggests that students who attend for four years do better by several measures, including academically. But, many students do not remain in the program for the entire four years. It is also difficult to recruit and to retain teachers to work in KIPP schools because the intensive program makes extraordinary demands on them. A large study of KIPP is now under way, but it will be several years before all of the findings are available.

The Massachusetts 2020 Expanded Learning Time initiative is also focused on adding a significant amount of instructional time for students. Schools participating in the initiative are given funds to support adding at least 300 hours of class time during the course of a school year. This program is also being evaluated.²⁹

We recommend that the federal government sponsor efficacy trials to identify which aspects or features of a program make a difference, with the requirement that the supported programs be set up to make such experiments possible. One can imagine requiring multiple program

operators to compare the performance of students selected to participate in their programs with those who were not selected. Then, researchers could look across multiple program evaluations to see if any promising programs emerged in the research.

Another way to advance our understanding of the effect of such efforts to radically extend and reorganize schooling would be to create a design competition from which several different program models could be chosen to be part of experimental trials. A precedent for this kind of undertaking is New American Schools, a non-profit corporation created by business leaders with the goal of significantly increasing student achievement. In the early 1990s, New American Schools launched a national competition to identify the best research-based ideas for what works in classrooms to improve student performance, and then formed public-private partnerships to implement those best ideas in low-performing schools around the country.

The proposed competition is an effort that could be undertaken by the federal government, the private sector, philanthropies, or any combination of such players. Those chosen to receive funding would be required to participate in the trials, which would examine various design features and bundles of features aimed at improving instructional quality and increasing student engagement to determine which are the most important. The programs could then be redesigned in response to the trials, with the goal of eventually creating one or more models for how schools and districts can increase learning time in ways that have a strong, positive effect on student outcomes.

Notes

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This manuscript is a product of the **Education Policy White Papers Project**, an initiative of the **National Academy of Education (NAEd)**. The goal of this project is to connect policymakers in the Administration and Congress with the best available evidence on selected education policy issues: equity and excellence in American education; reading and literacy; science and mathematics education; standards, assessments, and accountability; teacher quality; and time for learning.

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