

Office of the Superintendent of Schools
MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

October 8, 2013

MEMORANDUM

To: Members of the Board of Education

From: Joshua P. Starr, Superintendent of Schools

Subject: The Report of the 2013 Bell Times Work Group

Executive Summary

In December 2012, under my direction, a work group was convened to develop options to address high school students' need for more sleep, and in particular, to consider adjustments to school start times. *The Report of the 2013 Bell Times Work Group: Sleep Needs of Students, Scheduling Practices, and Options for Consideration* (The 2013 Bell Times Report) was submitted for my consideration in August 2013. The report reflects current research, reports from sleep experts, the efforts of other school districts, as well as previous efforts documented in reports published by Montgomery County Public Schools (MCPS) in 1998 and 1999.

In addition to summarizing current sleep research related to people ages 13 to 25, The Bell Times Work Group was tasked with developing options for changing bell times. I have reviewed The 2013 Bell Times Report and the research and am convinced that we should pursue an outcome that affords our high school students a later start to their day. From the options noted in the report, I have concluded that a combination of elements from Option 1A and Option 3 would best serve the educational and health needs of our students. The proposed bell schedule is noted below.

Considerable work is needed to ensure that stakeholder concerns and interests are included in our continuing evaluation of the bell times schedule proposed before a final decision can be reached. We will continue pursuing input with particular attention given to our most needy student populations and will report findings in the spring of 2014.

While data indicating that changing bell times increases student achievement is inconclusive, we can conclude that sleep deprivation in adolescents and adults is a public health issue. Consequently, I am recommending to the Board of Education that we delve deeper into the implications and feasibility of changing bell times and that we move forward with a process that reaches out to students, staff, parents, and community and includes further cost analysis as well as a detailed analysis of the implications of this recommendation including any unanticipated consequences.

Background/Research

The 2013 Bell Times Work Group Report provides extensive references and information regarding sleep deprivation and the impact on adolescents. My interest in continuing to explore the feasibility of changing school start times is based on my commitment to students' well-being. Adolescents

generally need 8.5 to 9.5 hours of sleep per night. Many high school students who need to rise early for school struggle to get sufficient sleep. For example, to obtain nine hours of sleep, a high school student who needs to rise at 6:00 a.m. (as would be typical in MCPS where students may need to catch the bus by 6:45 a.m.) would need to be asleep by 9:00 p.m., which is not only unlikely for a variety of reasons, but also counter to adolescent physiology. When high school start times are moved later, available research shows that students do take advantage of the opportunity to get more sleep rather than simply staying up later.

As cited in the attached report, research indicates that sleep deprivation is a public health and safety issue. In the teenage population, getting enough sleep helps increase important brain functions vital to the learning process and contributes to lower automobile crash rates, lower rates of obesity, and decreased incidences of depression. The research also demonstrates the larger positive effect for “students on the lower end of the distribution of test scores,” and in some studies, academic performance does show gains (see F. Edwards 2012 pp. 14–15 of The 2013 Bell Times Report).

Recommendation

The 2013 Bell Times Report is an excellent resource for discussion on sleep deprivation and changing bell times. While the work group provided variations of four options for changing bell times, I believe considering a variation of Option 1A will provide the means for receiving focused stakeholder input and further analysis of implications.

The current bell times schedule for MCPS is as follows:

Level	Time	Length of Day
High School	7:25 a.m.–2:10 p.m.	6 hours, 45 minutes
Middle School	7:55 a.m.–2:40 p.m.	6 hours, 45 minutes
Elementary School Tier 1	8:50 a.m.–3:05 p.m.	6 hours, 15 minutes
Elementary School Tier 2	9:15 a.m.–3:30 p.m.	6 hours, 15 minutes

My recommendation at this time is to pursue a modified Option 1A that extends the elementary school day by 30 minutes rather than 20 minutes. Therefore, my recommendation would establish the following bell times:

Level	Time	Length of Day
High School	8:15 a.m.–3:00 p.m.	6 hours, 45 minutes
Middle School	7:45 a.m.–2:30 p.m.	6 hours, 45 minutes
Elementary School Tier 1*	8:50 a.m.–3:35 p.m.	6 hours, 45 minutes
Elementary School Tier 2*	9:15 a.m.–4:00 p.m.	6 hours, 45 minutes

**The modification to Option 1A leaves the opening time for elementary schools unchanged and extends the day by 30 minutes.*

Extending the elementary day by 30 minutes equalizes the length of the instructional day for all three levels to 6 hours and 45 minutes. This aligns the length of the school day with most other school districts across the state of Maryland. This additional daily time will amount to 92 hours of added

instructional time or nearly 14 days annually at the elementary level. This is a much needed addition to our instructional day that will allow time for learning opportunities for students and additional collaborative planning for teachers.

The impetus behind this recommendation is based on my unwavering commitment to ensuring the well-being of each and every child who we serve in MCPS. The summary of health, developmental, and safety benefits noted above leads me to believe that pursuing this outcome is the right thing to do. Sleep facilitates working memory, memory consolidation, and performance in abstract and complex tasks involving higher brain functions. These aspects of human behavior impact who we are and how we interact with the world we live in and as such, are at the core of a student's state of being.

Scientists have demonstrated that sleep is even more important than previously thought. The research indicates that students, their parents, and MCPS staff need to take sleep for students—as well as for themselves—more seriously. The MCPS survey conducted in spring 2013 of high school students and parents revealed that 70 percent of parents who responded reported that high school started “too early,” and 69 percent preferred high school to start later, by either 30 minutes or 1 hour. In addition, 44 percent of parents reported a later bell time would have a positive impact on their child's safety. Consequently, I believe it is worth our time and continued effort to go deeper into the findings and see if we can determine a way to increase sleep time for our adolescent students by changing bell times.

Challenges

As we delve deeper into the feasibility of implementing a change to bell times, several key actions must occur. They include extensive and inclusive outreach to stakeholders; further analysis of the budgetary impact; and communication with association leadership, government agencies, and our elected leaders.

Particular effort should be made to elicit feedback from low-income families and other groups that do not usually participate in discussions of this kind, and who, as research in other districts illustrated, tended to be disproportionately affected by efforts to change school start times. Consequently, I have asked Mr. Timothy B. Warner, chief engagement and partnership officer, to work with staff to develop an outreach plan that will ensure we hear voices from all aspects of the community. This plan will include a description of the ongoing and transparent means for how stakeholder input will be considered. Engaging community leadership and underrepresented parents and community groups is critical to ensuring that the voice of all our stakeholders is heard; the work group surveyed high school students and parents only. I have asked the Office of Shared Accountability to suggest a plan to seek feedback from elementary, middle, and high school students, staff, and parents regarding the proposed option and related implications. We must provide the means to hear from all staff, students, and parents, and from the broader community, including businesses, daycare providers, and government agencies. A detailed outreach plan will be shared with the Board of Education and the public in the next few weeks.

While the Department of Transportation (DOT) staff estimated the fiscal impact of the various options, further work is needed to understand the potential impact on the operating budget and on choices that will need to be made if changes to school start times are to occur. I have asked DOT

staff to complete a detailed analysis and modeling of the route structure to determine a more exact cost analysis associated with this proposal. Staff also will study in greater detail other costs associated with this plan. It is important to note that funding beyond Maintenance of Effort must be requested by the Board of Education and approved by the County Council in order to move forward with this plan.

In addition, the superintendent's senior staff will be tasked to work with community, local government, and business leaders during the next several months to identify the impact on these entities and their interests.

Conclusion and Next Steps

The work group identified the need to educate our stakeholders about sleep deprivation. The work group members believe it is important that MCPS students, staff, and parents benefit from more information about the wide discrepancy between the hours of sleep needed versus the hours of sleep typically achieved by students; the relationship between sleep and learning; the impact of electronic devices on sleep habits; and other important findings in the sleep research literature regarding the academic, psychological, physical, and public safety concerns associated with sleep deprivation. Consequently, I have asked staff to develop a communication plan to educate staff, students, and parents on the benefits of sleep and the negative impact of sleep deprivation.

We have an obligation to delve deeper into the feasibility and implications of my recommendation that will allow high school students to get more sleep, which will improve their overall well-being. I anticipate a great deal of public discussion, and I recognize that there are many benefits and drawbacks to a change in the bell times. Nonetheless, the work should continue during the next several months. Our communications plan will bring the issue of sleep needs to the forefront of our discussion, allowing a better understanding of the potential benefits of implementing my recommendation. This educational effort will facilitate an informed decision-making process at the end of our review period. It is also my hope that it will serve to improve the quality of life and health of our students, staff, and parents regardless of the outcome of our efforts to change bell times.

During the next several months, we will need to determine how much we are willing to change and what we are willing to give up. Staff will complete a more thorough analysis of cost implications for this recommendation. I anticipate that by spring 2014, we will be ready to publically discuss further findings and a course of action and timeline. Due to the complexity of this endeavor, I anticipate implementation in the 2015–2016 school year at the earliest.

Recommended Resolution

WHEREAS, The superintendent of schools convened a work group to develop options to address high school students' need for more sleep; and

WHEREAS, The work group has completed its work and submitted *The Report of the 2013 Bell Times Work Group: Sleep Needs of Students, Scheduling Practices, and Options for Consideration*; and

WHEREAS, The report reflects current research, reports from sleep experts, the efforts of other school districts, as well as previous efforts documented in reports published by Montgomery County Public Schools in 1998 and 1999; and

WHEREAS, The Bell Times Work Group developed variations of four options for changing bell times; and

WHEREAS, The superintendent of schools recommends a variation to Option 1A switching the order of high schools and middle schools, starting middle schools 10 minutes earlier and high schools 50 minutes later, and lengthening the elementary instructional day by 30 minutes; and

WHEREAS, The superintendent of schools recommends that staff conducts further analysis into the implications and feasibility of changing bell times and that we implement a process that reaches out to students, staff, parents, and the community and includes further cost analysis and an analysis of the implications of this recommendation including any unanticipated consequences; now therefore be it

Resolved, That the Montgomery County Board of Education supports the superintendent's recommendation to pursue further study and analysis for the following modified bell schedule;

Level	Time	Length of Day
High School	8:15 a.m.–3:00 p.m.	6 hours, 45 minutes
Middle School	7:45 a.m.–2:30 p.m.	6 hours, 45 minutes
Elementary School Tier 1	8:50 a.m.–3:35 p.m.	6 hours, 45 minutes
Elementary School Tier 2	9:15 a.m.–4:00 p.m.	6 hours, 45 minutes

and be it further

Resolved, That once additional analysis and an extensive community management process are completed during the next several months, a final plan will be presented to the Board of Education in spring 2014.

JPS:LAB:lsh

Attachment