Start Time Survey Analysis

Prepared for Simsbury Public Schools
(minor additions/edits made by SPS Administration)

January 2018
Key Points from Sleep Expert Presentation: Dr. Daniel McNally, UConn

Overview of Survey* Data Analysis:

• Introduction
• Methodology
• Key Findings

*This survey was distributed to Simsbury families, SPS staff and students prior to reviewing any research or studies in order to build their understanding.
Scientific Key Points:
• Sleep patterns are directly connected to your circadian rhythm
  • If you’ve ever noticed that you tend to feel energized and drowsy around the same times every day, you have your circadian rhythm to thank. What is it, exactly? Your circadian rhythm is basically a 24-hour internal clock that is running in the background of your brain and cycles between sleepiness and alertness at regular intervals. It's also known as your sleep/wake cycle.
• A lot has to do with light – Are you an “Owl” or a “Lark”?
  • When it’s dark at night, your eyes send a signal to the hypothalamus that it’s time to feel tired. Your brain, in turn, sends a signal to your body to release melatonin, which makes your body tired.
• HS students are the perfect storm – almost feels like jetlag for students
  • Most sensitive to evening light - more light at night makes them stay up later
  • Sleeping in on the weekends - changes the internal clock
• On school days students get less sleep and when they sleep in on the weekends, it changes their internal clocks, which causes inconsistency
  • So, when in school and if they are deprived of or have inconsistent sleep, then when they are awake in school and asked to respond to something, they are slower because they are sleepy.
Questions and Responses:

- Should younger kids be earlier - is this ok?
  - Yes - ok to be earlier, change should occur at the middle school level

- How to account for early morning risers (Larks)?
  - There are genes that categorize you as evening or morning -
  - You cannot condition your kids to go to bed at 10 and wake up at 6 - it never works - you cannot make someone to go to sleep because it has to be on the internal clock

- Academic benefits?
  - Some experiments do demonstrate better academic achievement. We also know that studies shows us that attendance goes up

- Is staying up at night - homework and activity driven?
  - Even those that are the most “owl-like” - Actually - when you change the start times, kids get more sleep - about 52 minutes

- What about Sports?
  - Coaches reaction changed because they got more out of them in the shorter practices

- What is the ideal # of hours of sleep for teens?
  - 7 ½ to 8 ½ hours
  - Consistency of getting up is most important when treating the internal clock

- Solution to this conversation is to add on to sleep?
  - Changing the timing means kids do get more sleep - helps the students overall
Introduction

In this report, Hanover Research (Hanover) presents findings from our analysis of Simsbury Public Schools (Simsbury) Start Time Surveys. Separate surveys were administered by Simsbury to middle and high school students; parents of elementary, middle, and high school students; and elementary, middle and high school staff members.

The surveys examine stakeholders’ opinions on later school start times, perceptions of the impact of later start times on students, and perceptions of the impact of start times on family and teacher schedules and activities. In total, Simsbury received qualifying responses from 1,245 students, 1,159 parents, and 401 staff members. A breakdown of the stakeholder groups by school level is presented in the table below.

<table>
<thead>
<tr>
<th>Grade Level of Stakeholder Groups</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>GRADE LEVEL</strong></td>
<td><strong>COUNT (%)</strong></td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>330 (27%)</td>
</tr>
<tr>
<td>High School</td>
<td>915 (73%)</td>
</tr>
<tr>
<td><strong>Parents</strong></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>791 (68%)</td>
</tr>
<tr>
<td>Middle School</td>
<td>393 (34%)</td>
</tr>
<tr>
<td>High School</td>
<td>473 (41%)</td>
</tr>
<tr>
<td><strong>Staff Members</strong></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>153 (38%)</td>
</tr>
<tr>
<td>Middle School</td>
<td>97 (24%)</td>
</tr>
<tr>
<td>High School</td>
<td>172 (43%)</td>
</tr>
</tbody>
</table>
Methodology

- The start time surveys gathered feedback from students, parents, and staff members in the following areas:
  - Opinions on later school start times
  - Perceptions of the impact of later start times on students
  - Perceptions of the impact of later start times on schedules and activities
  - Student behaviors and activities

- The surveys were designed and administered by Simsbury Public Schools. Hanover was commissioned to clean up and analyze the survey data.

- Hanover’s data cleanup process included the following steps: (1) removing contradicting responses (e.g., respondent that selects both “I play sports in the fall” and “I do not play any school sports”); (2) removing responses that were only supposed to be answered by a subset of respondents (e.g., high school students); and (3) restructuring multiple response variables to an analyzable format.

- Sample sizes vary across questions as some questions only pertain to a subset of respondents (e.g., high school students).

- Hanover excluded certain ‘Not sure’ or ‘No opinion’ results from the analysis.
KEY FINDINGS
Key Findings: Opinions on Later School Start Times

- Parents are the most in favor of moving the school start time to a later time while teachers and students are split.
  - 71% of parents agree or strongly agree that the high school start time should be later than the current start time.
  - About 40% of middle and high school teachers agree or strongly agree that middle/high school should start later than the current start time. In contrast, 59% of middle school teachers and 52% of high school teachers disagree or strongly disagree.
  - About 39% of students agree or strongly agree that middle/high school should start later than the current start time, while 42% disagree or strongly disagree.

- Parents prefer a school start time that is 30 minutes or 60 minutes later than the current start time.
  - 27% of parents indicate 30 minutes later as the preferred school start time, and 39% indicate 60 minutes later as the preferred school start time.
Parents indicate that a later school start time would provide a number of benefits for students.

- A majority of parents indicate that a later school start time would allow students to sleep later (74%), help students focus more during the day (62%), and reduce stress for students (52%).
- However, 61% of parents indicate that a later start time would push back students’ after-school commitments (including sports) to later.

Teachers believe that a later school start time would have several negative impacts on students except for allowing them to sleep later.

- A majority of teachers indicate that a later school start time would push back students’ after-school activities and commitments to later in the day (78%), make students miss classes at the end of the day because of sports (60%), require students to stay up later to get everything done (58%), and provide students with less time for after school jobs (56%).
- However, 63% of teachers indicate that a later start time would allow students to sleep later.
Key Findings: Impact of Later Start Times on Schedules and Activities

- For parents, a 30 or 60 minute later start time for high school is perceived to work best for their schedules and activities.
  - Almost 50% of parents indicate that a high school start time that is 30 and 60 minutes later would have some or large positive impacts on the family’s morning routine and about 30% indicate that these later start times would have some or large positive impacts on the family’s afternoon routines.

- Parents also indicate that a 10 minute earlier start time for elementary school would have no impact to their schedules and activities and possibly some positive impact.
  - About 75% of parents indicated that a 10 minute earlier start time for elementary school would not disrupt family morning and afternoon routines. In contrast, about 34% of parents indicate that a school start time of 30 minutes earlier would have some or large negative impacts on their family’s morning routine, and about 46% of parents indicate that a start time of 60 minutes earlier would disrupt their family’s morning routine.
  - Earlier elementary start times (either 30 or 60 minutes later) would not require many families to pay for before school care. However, about 25% of parents indicate that they would have to pay for after school care if elementary school started at the earlier times.
Key Findings: Impact of Later Start Time on Schedules and Activities (Cont’d)

- For teachers, a 10 minute later start time works best for their morning/afternoon routines and school jobs and commitments.
  - About 75% of teachers indicate that a 10 minute later school start time would not disrupt their morning and afternoon routines. However, over 60% of teachers indicate that a 30-minute or a 60-minute later school start time would disrupt their afternoon routines.
  - About 71% of teachers indicate that a 10 minute later school start time would have no impact on their after school jobs or commitments. In contrast, a majority of teachers (60%-71%) indicate that a 30-minute or a 60-minute later school start time would negatively impact their after school jobs or commitments.
Key Findings: Student Behaviors and Activities That May Be Affected by Later Start Times

- Students may benefit from extra sleep with a later school start time schedule.
  - Of the students who report instances where they have been tardy to school, half indicate that their tardiness was due to oversleeping.

- Of the middle and high school students, 63% indicate that they play a sport for a school team.
  - 42% of those students play a sport in the fall, 29% in the winter and 48% in the spring.

- A later school start time may not be as disruptive to students’ after-school activities.
  - 80% of students indicate that they do not participate in after-school clubs or activities or participate in clubs/activities for three days or less per week.
  - 84% of students indicate that they do not participate in activities outside of school or participate in outside activities for three days or less per week.
  - 58% of high school students indicate that they do not have a job at any point during the school year.

- However, a later school start time could potentially mean that students have less time to work on homework at home.
  - 68% of students indicate that they currently spend one to three hours on homework each night.

- A later school start time could also push bed time later.
  - About 62% of students go to bed by 11 pm and about 53% wake up before 6 am.
Initial Analysis of Open-Ended Comments
(prepared by Brent Bette and Elizabeth Galici)

Faculty Survey:
Additional Questions:
• Would students miss class at the end of the day for athletic events?
• What would a later start time for SHS mean for elementary schools?
• How does a later start time impact academic performance?
• How much later would school start at SHS (30 minutes, 1 hr.)?

Family Survey:
Additional Questions:
• How would a later start time impact the district financially?
• How would a later start time impact elementary school? HJMS?
• Will a later start time lead to increased safety for students? (particularly for students who wait in the dark for school buses before school)
• How would athletics be impacted by a later start time? Would students miss class for sports? (Responders were against students missing class for athletics)
Student Survey:

Additional comments or ideas:

• Students who want to keep the current schedule generally cite dismissal time as the main reason (i.e., getting out later in the day would leave less time for homework/extracurricular activities), and this outweighs their desire for an extra hour of sleep in the morning.

• Number of students for/against changing the start time is fairly even

• Students who could not decide whether they were for/against later start time were torn between getting more sleep and an earlier dismissal time.