

The Debate Over Later School Start Times

A hand holding a hammer is positioned to strike a black digital clock. The clock's display shows '7:59' in large digits, with 'AM' to the left. Below the time, it shows '10 -4 MON' and '224'. The brand name 'SHARP' is visible at the bottom of the clock's frame. The background is a warm, out-of-focus wooden surface.

A research-based recommendation
from Superintendent Dr. Scott Carpenter
Monomoy Regional School District
and findings after one year of implementation

"Everybody learns better when they are awake."¹

Mary Carskadon, Brown University Professor of Psychiatry and Human Behavior

¹ <http://www.theatlantic.com/education/archive/2015/08/why-school-should-start-later/401489/>

In the spring of 2016, the Monomoy Regional School Committee was presented a research-based recommendation by the Superintendent Carpenter to “flip” our current school start times, a move which would begin the elementary schools prior to the middle and high school.

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After much public debate, and gathering input from parents, staff, and students, the School Committee voted to implement this recommendation beginning September 2017.

Project Citizen

In April 25, 2012, Mrs. Barnes' Chatham Middle School class made a 15-minute presentation to the Monomoy Regional School Committee with the findings and a recommendation from their Project Citizen research.

The students recommended that the school district adopt an 8:30 A.M. start time for the middle school and high school. This recommendation proposed starting school roughly an hour later than the start times of middle schools and high schools in Harwich and Chatham before regionalization.

Advantages mentioned: Shift in start time will provide students more sleep, find student drivers more alert (having less accidents), find students in class more alert, provide students more time to eat breakfast, resulting in improved grades, decreased tardiness, and improved attitude.

Concerns mentioned: Some students have afterschool jobs and afterschool sports. A later start will delay afterschool athletic and extracurricular start times causing these events to go later into the day.

Why Schools are Slow to Respond to This Research

Changing school start times is complex. It is not as simple as delaying the start time for high school students. Monomoy, like most school districts, uses the same buses for high school, middle school and elementary school, so adjusting any start time impacts bus runs for all grade levels.

Other concerns:

- The impact on student's income and local businesses if high school ends after 3:00 P.M.
- The impact of interscholastic sports due to a later start time, particularly if all other league schools haven't shifted their schedules
- The impact on families who rely on older children to care for elementary-aged children
- The impact of change on individual staff, students, and family members' schedules

A decision to adjust start times will not make everyone happy, but if we focus our decision on what research is telling us and the successes seen in other districts that have better aligned school start times to the circadian rhythms of children, the decision should be more clear.

Later Start Time Research Published Since the Project Citizen Presentation

Researchers from Oxford and Harvard report in a 2015 study that school start times are generally not synchronized with teen circadian rhythms. This results in reduced concentration, performance, attention, productivity, creativity, communication, and socialization. And, this results in increased stimulant use, irritability, depression, anxiety, along with physical ailments. Aligning education times with students' circadian rhythms can improve learning and reduce health risks.

The full 72-page study from February 2014:

<http://www.ccsdschools.com/Community/documents/ImpactofLaterStartTime.pdf>

Presentation summary:

<http://www.cehd.umn.edu/carei/documents/WahlstromPresentationHandout.pdf>

A 2014 study from the University of Minnesota of more than 9,000 students attending eight high schools in three states found, core academic performance improved at schools with later start times, as did student attendance, while tardiness, substance abuse and symptoms of depression declined. School counselors and nurses reported fewer students seeking help for emotional problems and physical ailments. And, 92% of parents reported that their teenagers were “easier to live with” when given the chance to get more sleep due to later high school start times.

Paul Kelley, Steven W. Lockley, Russell G. Foster & Jonathan Kelley (2015) Synchronizing education to adolescent biology: 'let teens sleep, start school later', *Learning, Media and Technology*, 40:2, 210-226, <http://dx.doi.org/10.1080/17439884.2014.942666>

In 2003, Hingham Public Schools was the first Massachusetts district to respond to the growing amount of research supporting shifts to a later high school start time. It moved from a 7:20 A.M. to a 8:00 A.M. start, and since the shift students' academic performance, attendance, MCAS scores, and AP scores are up.¹

Within the Project Citizen presentation, the students also shared the initial outcomes seen at Nauset Regional High School, which in 2012 shifted its start time from 7:25 A.M. to 8:35 A.M. According to Nauset's administration, "The results were instantaneous."²

- 53% drop in the number of failing grades
- 38% decline of D's and F's
- Decrease in the number of suspensions from 166 to only 19.
- Decrease in tardiness to school
- These findings have held up over time.³

Of Massachusetts schools, Nauset has had the most dramatic shift in high school start times. Other Massachusetts school districts have followed Hingham's lead including Duxbury (7:30➔8:20) and Sharon (7:30➔8:15).

As our Monomoy school district regionalized, our initial high school start time was selected with this research in mind. Harwich High had begun at 7:15, Chatham Middle/High School at 7:40, but the new Monomoy Regional High School began at 8:00. Other school districts across the state are mulling later start times, and the Massachusetts state Legislature is debating a bill to study the issue statewide.

Sources:

1 http://archive.boston.com/yourtown/hingham/articles/2009/12/03/school_districts_south_of_boston_examine_delaying_high_school_start_times/

2 <https://www.bostonglobe.com/metro/2016/03/09/students-see-benefits-from-later-school-start-times/OOb4vtHm4XZTBLm5X78V9L/story.html>

3 <http://www.startschoollater.net/success-stories.html>

School Start Times on Cape Cod

Elementary School

- Nauset 7:45 A.M.
- **Monomoy** (2017-18) **7:45 A.M.**
- Mashpee 8:15 A.M.
- Provincetown 8:30 A.M.
- **Monomoy** (2016-17) **8:55 A.M.**
- Barnstable 9:00 A.M.
- Bourne 9:00 A.M.
- Sandwich 9:00 A.M.
- Falmouth 9:05 A.M.
- D-Y 9:10 A.M.

High School

- D-Y 7:00 A.M.
- Bourne 7:15 A.M.
- Barnstable 7:20 A.M.
- Falmouth 7:25 A.M.
- Mashpee 7:30 A.M.
- Sandwich 7:30 A.M.
- **Monomoy** (2016-17) **8:00 A.M.**
- Nauset 8:35 A.M.
- **Monomoy** (2017-2018) **8:45 A.M.**

At present, Nauset is the only Cape Cod public high school with a later start time than Monomoy. Nauset is also the only school district with start times at both the elementary and high school levels aligned to children's natural circadian rhythms.

A Disconnect Between “Wake-Up Time” and School Start Time

| | Circadian | Ideal |
|------------|---------------------|--------------------------|
| <u>Age</u> | <u>Wake-Up Time</u> | <u>School Start Time</u> |
| under 11 | 6:30 A.M. | 8:30-9:00 A.M. |
| 16 | 8:00 A.M. | 10:00-10:30 A.M. |
| 18 | 9:00 A.M. | 11:00-11:30 A.M. |

The research would suggest 10 A.M. start times for high schools would be more optimal, but is a 10 A.M. start time realistic?

High School Sports Driving Many School Schedule Decisions

One of the concerns of later start times raised by the Project Citizen presentation was its impact on interscholastic sports. For many communities debating later high school start times, the concern is that a later start time (resulting in later dismissals) will impact the athletic program, delaying game start times.

As we were developing the initial start times for the new Monomoy Regional School District, we heard “loud and clear” this same concern. Initially we wanted the high school and middle school to start later than the elementary school, but parents and students on the joint high school councils conveyed concerns with later start times and the travel involved with participation in the South Shore League.

Monomoy Regional High School, while competing in the South Shore League over the past two years, has typically needed to dismiss students 45 minutes to an hour before the end of the school day to travel to games far off Cape. These student-athletes then return home from away games in Hull, Cohasset, Norwell, and Rockland between 9:30 P.M. and 10:30 P.M.

Monomoy Regional High School’s movement this year into the Cape & Islands League positions us to move our start time later than 8:00 A.M. With an 8:45 A.M. start, there still may be a need to occasionally release some student-athletes before the end of the school day, but the need to do this will be rare. Like Nauset Regional High School, which starts after 8:30, we will establish game start times 4:00 P.M. or later, just as Nauset has successfully done with their league.

Middlesex League Superintendents

6.1.1

Joint Statement on Later Start Times for High Schools

"Everybody learns better when they're awake."

(Mary Carskadon, The Atlantic, August 17, 2015)

The purpose of this collaborative statement is not to make a case for later high school start times. The research is clear on this topic that later start times best support the social and emotional needs of our high school students. The Middlesex League Superintendents collectively wanted to express our clear support for later high school start times. Our intention is to commit to a deadline and to the necessary consensus building required to make a change in long-standing practice. Doing what is right for adolescents will mean changing adult schedules and behaviors. Ultimately, the choice to change will distill down to what communities value most.

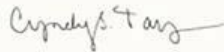
To this end, our League goals are as follows:

- High School start times between 8:00 a.m. and 8:30 a.m. for all Middlesex League High Schools by the start of the 2018-2019 school year. (Current start times range from 7:30 a.m.-8:00 a.m.)
- After-school competitions will be scheduled so that students do not routinely miss academic time

The expression of our intentions and our timetable should provide ample opportunity to address all stakeholder concerns and to reallocate existing funding or commit to the new funding that may be needed to implement later start times. Moreover, by setting a timeline for Fall 2018, we believe districts, families, and organizations that oversee athletic competitions, academic competitions and other student activities will have sufficient time to prepare for a change that will benefit all our students.

We hope this joint statement is the first of many as we work together across our respective communities to implement practices that are in the best interest of children.

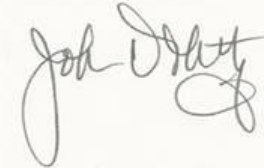
Sincerely,



Kathleen Bodie, Ed.D.
Arlington Public Schools

Cyndy S. Taymore
Melrose Public Schools

Jean Fitzgerald, Ed.D.
Watertown Public Schools

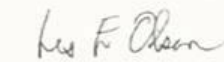


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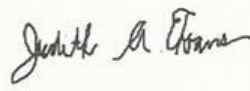


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Off Cape, a group of Superintendents from the Middlesex League, representing 12 school systems including Winchester, Belmont, and Lexington, have responded to the overwhelming benefits of later high school start times and have released a statement, pledging to shift all high school start times to 8:00 A.M. or later by the 2018-19 school year.

Source:

<https://www.bostonglobe.com/metro/2016/03/29/suburban-boston-superintendents-group-favors-later-high-school-start-time/8BdOOrfP03XP0CpuLxbchI/story.html>

This isn't just an
issue of later
school start
times for high
school students.

A Double Disconnect Between Monomoy's "Wake-Up Time" and School Start Time

| <u>Age</u> | <u>Circadian Wake-Up Time</u> | | <u>Monomoy Current Start Time</u> |
|------------|-----------------------------------|------------------|---------------------------------------|
| under 11 | 6:30 A.M. | Ideal 8:00 A.M. | 8:55 A.M. |
| 16 | 8:00 A.M. | | 8:00 A.M. |
| 18 | 9:00 A.M. | Ideal 10:00 A.M. | 8:00 A.M. |

Challenges with Monomoy's Current (2016-17) Elementary Start Time

With the current 8:55 A.M. start time, Monomoy's elementary school students' school days end at 3:25 P.M.

- As a parent, you may remember the pitter-patter of little feet and a knock on your bedroom door, waking you up shortly after 6 A.M., even on weekends.
- Most children in this age group have been up and at their peak since 6:30 A.M.
- What we've heard resoundingly from elementary teachers is that by 2:30 P.M., if not slightly earlier, elementary-aged students are academically exhausted.
- Yet, the current Monomoy Regional elementary school day continues for another hour, resulting in a lost hour of learning each day.

The long-term impact: If we continue to have elementary school days start at 8:55 A.M., we will continue to lose an hour of quality learning time each day because the children are exhausted by 2:30 P.M. Over the course of a year, each child could be losing 180 hours of learning time. Over five years, from kindergarten through Grade 4, this could magnify to 900 hours of lost cumulative learning time – this equates to nearly a full year of lost learning time.

Is this in the best educational interest for our elementary students?

Challenges with Monomoy's Current (2016-17) Middle School and High School Start Time

With the current 8:00 A.M. start time, Monomoy's middle school and high school students' school days end at 2:30 P.M.

- As a parent, you may remember battling unsuccessfully with your teen, trying to get them up in time for a 7:15 A.M. bus.
- Many teens in this age group may not be fully awake until 9:00 A.M.
- Yet, our school day starts a full hour before the time when many teens are fully awake and ready to learn.

The long-term impact: If we continue to have our middle and high schools start at 8:00 A.M., we will continue to lose an hour of quality learning time each day because many teens are not fully awake and ready to learn. Over the course of a year, each teen could be losing 180 hours of learning time. Over five years, from Grade 8 through Grade 12, this could magnify to 900 hours of lost cumulative learning time – this equates to nearly a full year of lost learning time. Of equal concern is that many of our teens begin unhealthy habits and a reliance on caffeine to compensate for a lack of sleep.

- *Is this in the best educational and health interest for our adolescent students?* •

The realized benefits of
flipping start time

...

Monomoy's results our first year of implementation

(Correlations, not cause and effect)

- One month into implementation even naysayers began to see first-person the benefits of a start-time shift for their children.
- Absence rates unchanged in 3 of 4 schools, although one elementary school realized a 40% decrease in absences.
- Tardies increased at the elementary schools, which moved to earlier start times, but oddly increased at our high school too.
- Early dismissals decreased at the elementary schools.
- Discipline referrals were down by 40% at the elementary schools, particularly in with referrals after lunch, yet total referrals up some at the middle school.
- Elementary nurse referrals, particularly after lunch, down significantly.

Monomoy's results our first year of implementation, cont.

(Correlations, not cause and effect)

- Anecdotal evidence from feedback by our teachers that elementary students are more alert and engaged in the afternoons, given the earlier start time.
- Anecdotal evidence from our high school teachers that students are more alert and engaged during the first block of the day, given the later start time.
- Our middle school students (Grades 5-7) realize less clear benefits, entering developmentally as elementary students and leaving as teens.
- High school students, in particular, are using the additional hour before school to get extra help.
- Academics, on the whole for the district, up; slightly more in ELA than math.



A Superintendent/father's first person reflection

- Two teens at the high school
- Later start times have largely ended the “morning battle” trying to get teens up and out the door for a 7 AM bus – the extra hour and an 8 AM bus made a huge difference in positive parent-student interactions.
- Later start time found both actually eating breakfast daily.
- Tardies to school in our household largely ended.
- The academic change for my sample size of two was significantly improved – both regularly used the mornings to get extra help.
- Was it just a year's worth of maturity or a later start time?