

Dear Parents and Guardians:

This is the seventh in our series of publications on the High School's new **8:26 a.m.** start time, designed to keep you informed about the district's efforts to create an environment in which students are more alert and ready to learn.

Your family's efforts at home are much appreciated, as only your child can ensure he or she is using those extra 45 minutes each morning to improve his or her sleep quality and overall health. For additional tips and resources, check the High School home page at www.gfsd.org.



Graduate research assistant Melanie Derosier and Dr. Pamela Thacher presented data to the Board of Education on Nov. 19.

Preliminary data in sleep study shows improvement

Data from the second wave of St. Lawrence University's sleep study shows Glens Falls High School students getting about 20 more minutes of sleep per day this fall. Students' sleep quality has also shown a "really significant" improvement, according to lead researcher Pamela Thacher, who presented preliminary data to the Board of Education on November 19.

Students participating in the study answered questions about their sleep times, mood, and caffeine use this past May, and again in mid-November, as part of data collection in the multi-year study on how the school start time change affects academic achievement and overall student health.

Survey data obtained so far shows students total sleep time increased from an average of 7 hours and 17 minutes in May to 7 hours and 37 minutes in November, Dr. Thacher said. Reported rise times now average to 7:00 a.m., and reported bedtimes average to 10:42 p.m. The High School's start time changed from 7:47 a.m. to 8:26 a.m. in September.

Dr. Thacher explained that students' average gain in nightly sleep is really 30 minutes during the week, according to study data. But when weekends are factored in, the gain in total sleep time averages 20 minutes per day.

"Some predicted students would stay up later with the start time change, and yes, they did—by two minutes," Dr. Thacher said, referencing the preliminary data analysis. "This is consistent with every other sleep study that has been done. Students' bedtimes typically don't change. It's quite true that some students do stay up later and some go to bed earlier. This study shows us the mean."

Absentee and achievement data is still being analyzed, but student tardiness rates have dropped from 9.44% over the first ten weeks of the 2011-12 school year to 6.14% over the same time period this year, reported High School assistant principal Liz Collins.

The real comparison will come in the spring, Dr. Thacher said, when her team is able to

measure data from May of 2012 against data from May of 2013.

"To see a sleep quality index go from an average of 9.6 in the first wave of data collection to a 6.3 in the second wave is really significant," Dr. Thacher said. Lower indices correlate to better quality of sleep. Also in the second wave, fewer study participants were referred to the school counseling office for depression screening, based on their questionnaire responses.

Participation in the study is completely voluntary for students, and they can choose to fill out surveys in any or all rounds of data collection. Parents can opt their child out of an invitation to participate by contacting the main office of the High School. Details and an opt-out form are available on the High School web page at www.gfsd.org. The questionnaires are also posted online for parents to view.

Aggregate results of the study will be shared with parents, students, and the school community once the research is complete.

Sleep variables

Variable	Wave 1	Wave 2
Sleep quality	9.6	6.3
Total sleep time	7 hrs. 17 min.	7 hrs. 37 min.
Rise Time	6:40 a.m.	7:00 a.m.
Bed Time	10:40 p.m.	10:42 p.m.
Time it takes to fall asleep	26 min.	23 min.

A slide from Dr. Pamela Thacher's presentation on Nov. 19. (left) A lower sleep quality variable in Wave 2 is an improvement, Dr. Thacher said.