

Dear Parents and Guardians:

This is the eighth 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.

Data: sleep time increasing

Stress scores, discipline issues decrease; Third wave May 28

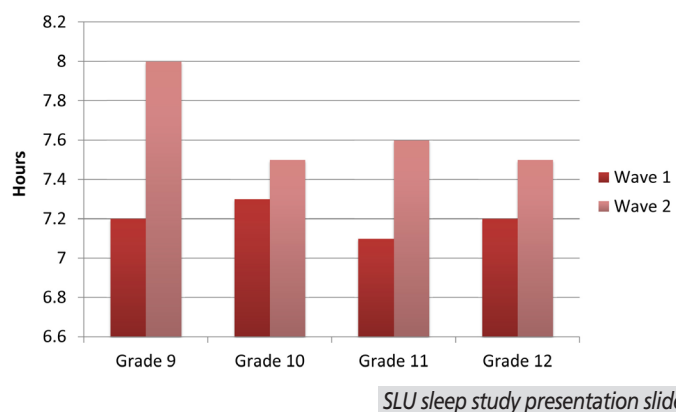
Analysis on the first two waves of data from the St. Lawrence University sleep study shows that GFHS students are getting more sleep—with increases averaging between 12 and 48 minutes more per night from last spring to this fall. Survey data shows that self-reported depression, anxiety and stress (DASS) scores are lower across all grade levels from last spring to this fall, and discipline incidents have dropped as well.

The news comes as the SLU research team prepares for a third wave of data collection in the multi-year study on how Glens Falls high school's start time change affects academic achievement and overall student health. Students participating in the study answered questions about their sleep times, mood, and caffeine use this past May, and again in mid-November. The third wave of data will be collected on May 28 and 29 during participating students' physical education classes.

Lead researchers Drs. Pamela Thacher and Serge Onyper discussed some initial findings with high school administrators in early April. Data from the first and second collection waves shows that:

- Mean weekday bedtimes for Grade 12 and Grade 11 stayed constant across the two data collection waves, at 10:54 p.m. and 10:51 p.m., respectively. Grade 10 participants' bed times went from 10:30 p.m. to 10:42 p.m., and Grade 9 participants' bed times went from 10:30 p.m. to 10:36 p.m.
- Mean weekday rise times were later in wave 2 for all grades—Grade 12 respondents went from 6:42 a.m. to 7:06 a.m., and Grade 11 respondents went from 6:48 a.m. to 7:06 a.m. Grade 10 respondents' average wake-up time was 6:36 a.m. in wave 1, and 6:48 a.m. in wave 2, while Grade 9 respondents rose at 6:24 a.m. in wave 1, and 7:00 a.m. in wave 2, on average.

Mean Total Sleep Time – Self Report by Sleep Diary



- Total sleep time (as indicated in the chart above) increased for participants at all grade levels: Grade 12 by 18 mins., Grade 11 by 30 mins., Grade 10 by 12 mins., and Grade 9 by 48 mins.
- Students reported lower overall levels of stress, anxiety and depression in wave 2 as compared to wave 1, and fewer study participants were referred to the school counseling office for depression screening based on their questionnaire responses, as compared to wave 1.
- Reports of disciplinary problems, including disorderly conduct, disrespectful behaviors, insubordination, and tardiness are each lower in wave 2 than wave 1.

Academic achievement and physical health data is still being analyzed. 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.

“We don't expect to see a significant change in one year,” Dr. Thacher said, referring to student achievement data. “There may even be a decrease in performance that is due to factors totally unrelated to start time change, such as cohort intelligence, or the economy of our city and nation.”

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.