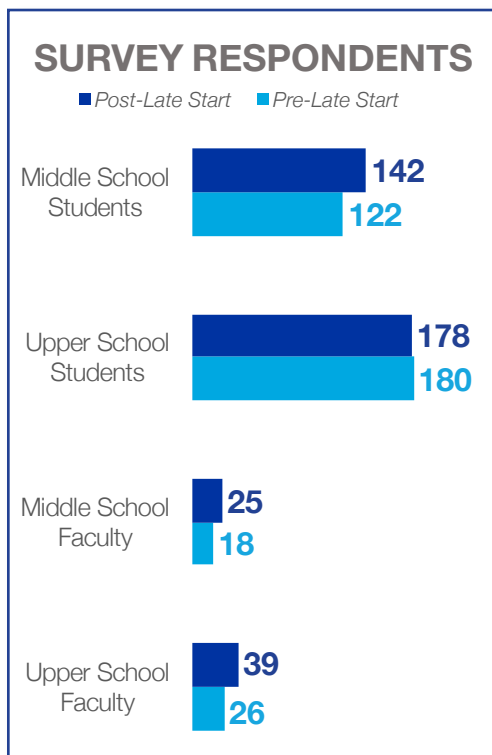


Late Start Pilot Highlights

In the 2016-17 school year, student body president-elect Leigh Marshall proposed the idea of a later school start time, citing a body of research that supported the exploration of this topic. The Center for the Advancement of Girls sourced further research on adolescent sleep and a growing body of research touting the benefits of late start school days, including:

- Early morning start times can be detrimental to the health and well-being of adolescents.
- Schools that implemented later start times recorded the following outcomes: increased academic performance, improvement in attendance and reduced tardiness rates, improved participation and focus in class.
- Teens have sleep-wake cycles that can be two hours later than adults or younger children, and early school start times are incompatible with their circadian rhythms.
- When middle or high school start times are pushed later, students still tend to go to bed about the same time, but, due to waking up later, increase their sleep.
- Girls appear to have poorer quality sleep and an even stronger circadian preference for later bed and wake times.
- The National Sleep Foundation recommends 9-11 hours of sleep for 6-13 year olds, and 8-10 hours of sleep for 14-17 year olds.

Based on these research findings, the Center for the Advancement of Girls piloted a Late Start Initiative in the Middle and Upper schools on seven consecutive Wednesday mornings in January 2018 to determine if a later start time would have an impact on student fatigue. A pre- and post-initiative survey was conducted with students, parents, and teachers to determine the effectiveness of a later start time in Middle and Upper School.



The CDC research found, for example, that students who start school just 30 minutes later, at 8:30 a.m. instead of 8 a.m., saw significant improvements in academic performance, school attendance, and mental and physical health outcomes [...] Evidence is mounting to suggest that even small delays in start times can make a difference for student learning and wellbeing.

DR. JERUSAH CONNER, ASSOCIATE PROFESSOR, DEPARTMENT OF EDUCATION AND COUNSELING, VILLANOVA UNIVERSITY

EMERGING THEMES

Middle School Students:

Middle School students reported an improvement in academic performance during the pilot, whether from actually getting more sleep and therefore being more focused in class, or from having more time in the morning or in the evenings to complete school work.

Wellness themes that emerged from the pilot include Middle School students feeling more focused, and less stressed and irritable. As one parent stated: *“Having the late start in the middle of the week was AMAZING. Completely the break/extra sleep/recharge we needed to reset our energy...”*

“

Teens need about nine hours of sleep to function best, and when they fall short of this, their ability to learn, listen, and concentrate can be affected [...] Later start times not only help our adolescents perform better in school but can also benefit their overall health and mental well-being.

DR. KATHERINE DAHLGAARD, PHD, ABPP,
CHILD PSYCHOLOGIST WITH EXPERTISE IN
CHILDHOOD ANXIETY

Upper School Students:

Upper School students reported less anxiety, greater ability to focus, more engagement in class and less irritability during the Late Start Pilot. They also reported feeling happier during the pilot, consuming less

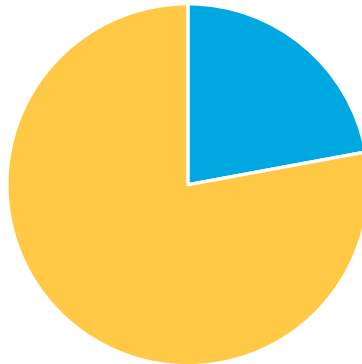
caffeine to compensate for the lack of sleep, having time to eat breakfast, and enjoying more positive and meaningful interactions with one another and their teachers.

Upper School students responded: *“I was able to have more impactful conversations with my friends and teachers because we were all in a receptive mood,”* and *“the school as a whole felt so much [more] happier.”*

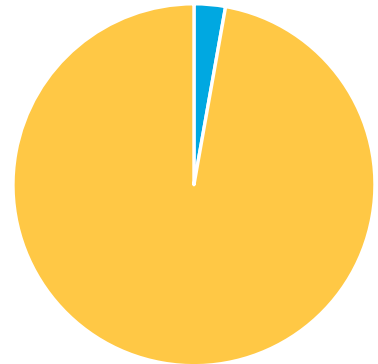
REPORTED AVERAGE HOURS OF SLEEP ON TUESDAY NIGHTS

BEFORE THE LATE START PILOT

22.1% of Middle School students achieved 8-10 hours of sleep per night

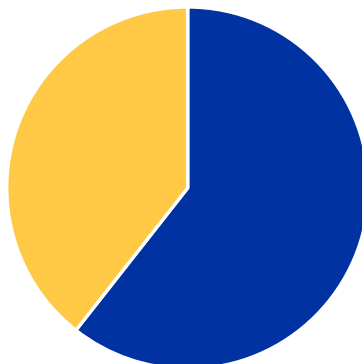


2.8% of Upper School students achieved 8-10 hours of sleep per night

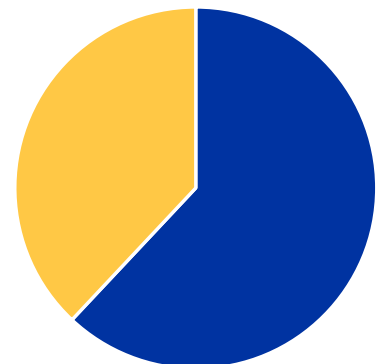


DURING THE LATE START PILOT

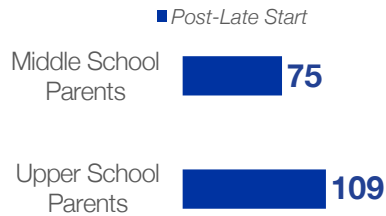
60.6% of Middle School students achieved 8-10 hours of sleep per night



62% of Upper School students achieved 8-10 hours of sleep per night



SURVEY RESPONDENTS



Parents:

Some parents expressed concern over the disruption to their family's morning routine and loss of instructional time during the initiative. Additionally, these parents expressed concern over the inconsistency of Wednesday's late start for their daughter's weekly routine. Parents also indicated that giving fewer homework assignments may also support the achievement of more sleep.

Other Upper School Parents reported that the late start provided a reprieve in the middle of the week, and that there was less anxiety in their family on these mornings. These parents indicated that their daughters seemed calmer, more peaceful, and alert on late start days. As one parent stated: ***"My daughter has ample time to get a good healthy breakfast in a calm and not rushed manner."*** Many parents reported feeling less rushed in the morning and appreciating the reprieve and relaxation that having a mid-week break afforded.



87.6%

OF UPPER SCHOOL STUDENTS SAID THAT 9:05 A.M. IS THEIR IDEAL START TIME
(NO DATA ON THIS FOR MIDDLE SCHOOL)

44.6%

OF MIDDLE SCHOOL PARENTS WANT TO MAINTAIN THE 8:05 A.M. START TIME

57.9%

OF UPPER SCHOOL PARENTS PREFER A 9:05 A.M. SCHOOL START TIME, AND AN ADDITIONAL 8% EXPRESSED INTEREST IN A START LATER THAN 8:05 A.M., EVEN IF JUST ONCE A WEEK

55.4%

OF MIDDLE SCHOOL PARENTS WOULD LIKE TO START LATER THAN 8:05 A.M., EVEN IF JUST ONCE PER WEEK