# The Role and Impact of Homework

# Overview of Research and Feedback from 'Later Start Time for High School Students' Community Forum

#### Research:

- Medical research studies focused on developmental factors as an explanation for changes in youth's sleep, specifically the decline in melatonin in puberty.
- Social Science studies showed that one's social relations (parents, friends etc.) determines health – related patterns including sleep patterns.

#### Overview of Medical Research

**National Sleep Foundation** 

•Widespread adolescent sleep deprivation driven by a conflict between teen's internal biological clocks and the schedules and demands of society

•Optimal levels of sleep for adolescents is 8.5 – 9.5 hours

#### **Overview of Social Science Research**

Social Ties and Adolescent Sleep Disruption
Journal of Health and Social Behavior

- Social determinates of sleep are more important predictors of changes in sleep patterns than developmental measures.
- •Healthier sleep patterns correlated with strong social ties such as when students feel part of the schools they attend and/or are surrounded by academically oriented and prosocial friends.
- •Increasing attachment to school as youths enter HS is significantly related to lower levels of sleep disruption.

# In Our Work for Later Start Time The Logistical Factors for Consideration Included

- Academic achievement
- Athletics
- Co-curricular activities
- External scheduling considerations for students
- Transportation for all students

### Feedback from the Community Forum

#### **Under the Medical Factors**

"A lack of energy and a conflict between the adolescent circadian rhythm with the schedule and demands of the workload/homework" was expressed

#### **Under the Social factors**

Priorities articulated by focus groups/round table articulated "Homework load being too heavy" and to "Lessen the homework load"

## The High School Homework Committee

The Committee began with the following mission:

- Review the research about the role of homework and its impact on students' sleep
- Survey the faculty and students to assess their practices and beliefs
- Draw conclusions based on the research and collected evidence

# External Research On Homework Guideline Examples

- Daily Homework Guidelines
  - Grade 9-12: 90-120 minutes\*
- Weekly Homework Guidelines
  - Grades 9-12: 280-480 minutes per week\*
- \*
  Assignments may and can vary widely based on the rigor of their schedules

Note. Adapted from Homework policies review. (2012, July). Retrieved January 6, 2017, from Hanover Research website: http://www.hanoverresearch.com/;Cooper, H. (2007). *The battle over homework* (3rd ed.). Thousand Oaks, CA: Corwin Press.

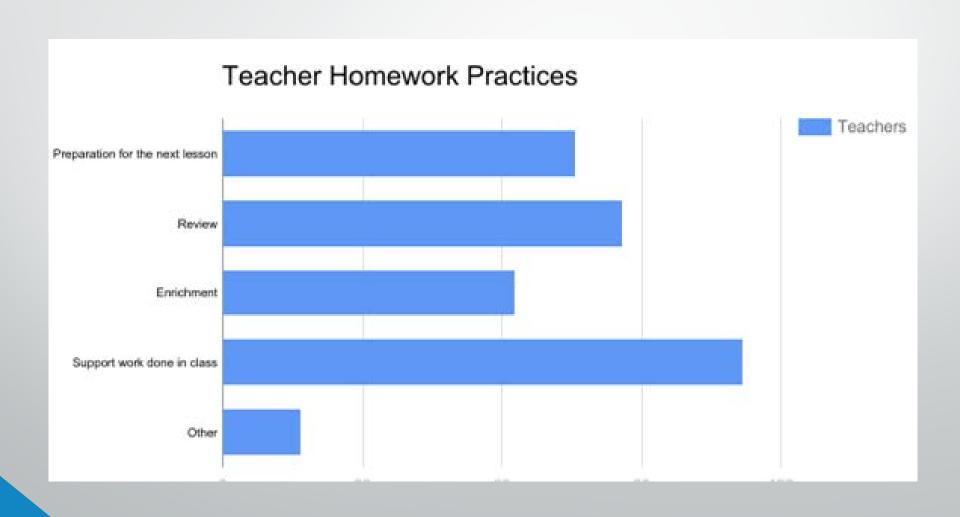
#### Research on Best Practices for Homework

- •Articulate the <u>value and intent</u> of the homework assignment
- Assign <u>realistic due dates</u> based on type of assignment and estimated time of completion
- Provide students with <u>feedback</u> that is timely and accurate to ensure the effective monitoring of content delivery and student learning progress

Source: (Homework policies review, 2012)

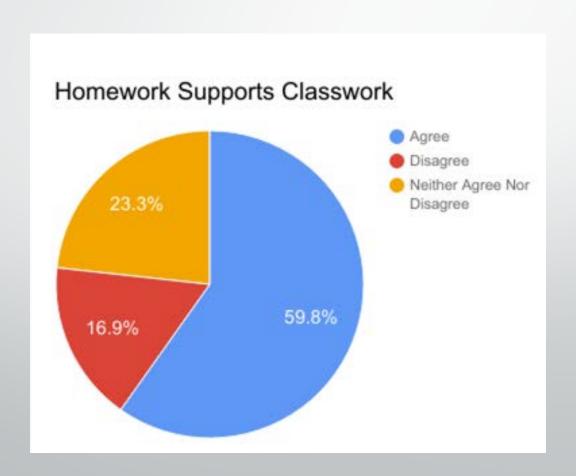
#### Teachers: Value and Intent

Our data: The Value and Intent of Homework Assignments



# Students: Value and Intent Student responses to the following statement:

"My homework supports the work I do in class"



# Teacher Reports on Completion of Homework

75% Regents Level Teachers	48% Honors Level Teachers	62% AP/College Level Teachers
15 to 30 minutes for successful completion per course	15 to 30 minutes for successful completion per course	30 to 60 minutes for successful completion per
75 - 150 minutes for five core subjects	75 - 150 minutes for five core courses	150 - 300 minutes for 5 AP classes

# Student Reports on Completion of Homework For All Courses

46% Students in Regents/Honors Courses

69% Students in AP/College Level Courses

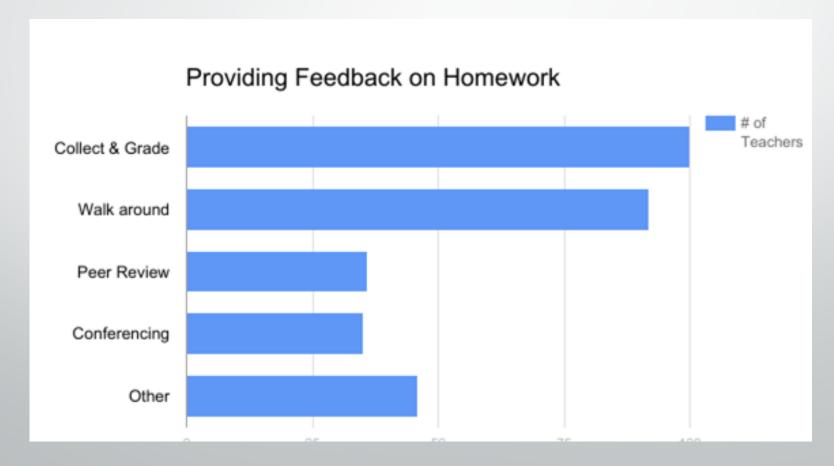
Time for successful completion – 120 to 180 minutes

Time for successful completion – 180 minutes or more

### Teachers: Feedback on Homework

Teachers reported that they provide feedback in one or more of the following

ways:



#### Student Feedback

# "Doing homework helps me to do better academically"

- •53% agree
- 24% disagree
- 23% neither agree or disagree

Other feedback received:

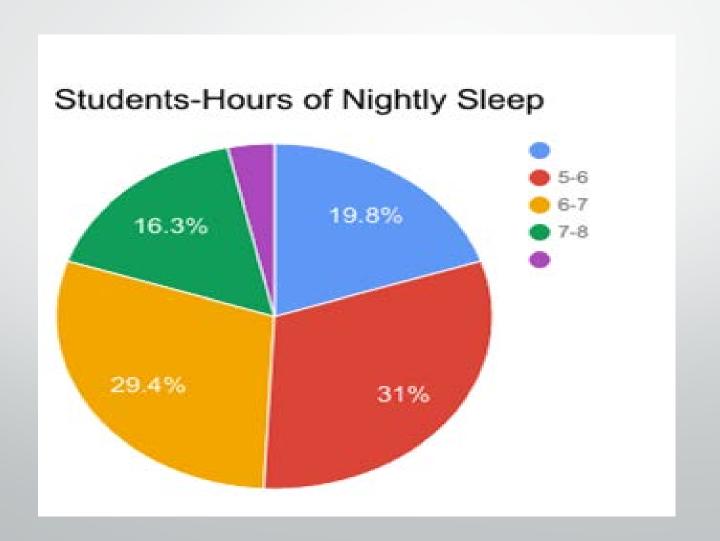
Students returning from college indicated that they are "better prepared" than their peers

### Research: Impact on Sleep

- "Studying late into the night also likely agitates students enough during the evening to make it difficult for them to fall asleep"
- "Likewise, the perception of stressful demands from the three most important domains in adolescents' lives—family, peers, and school—can create a degree of arousal that makes it difficult for adolescents to sleep"

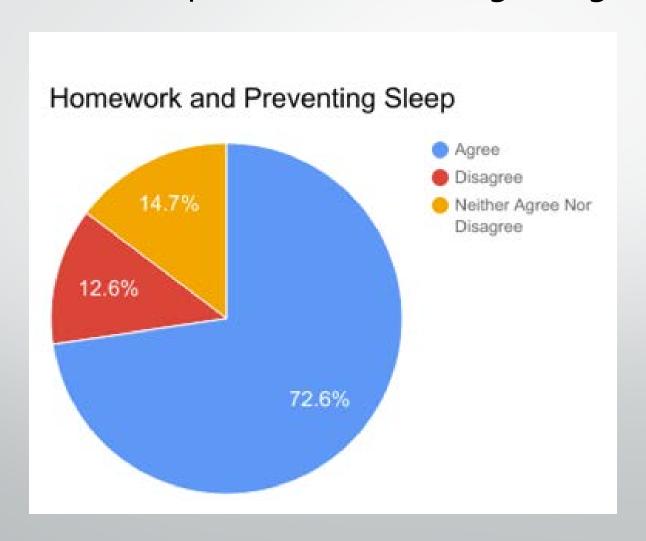
(Fuligni, & Hardway, 2006)

# Student Survey Question: Approximately how many hours do you sleep per night?



## Student Survey Question

"Doing homework prevents me from getting enough sleep"

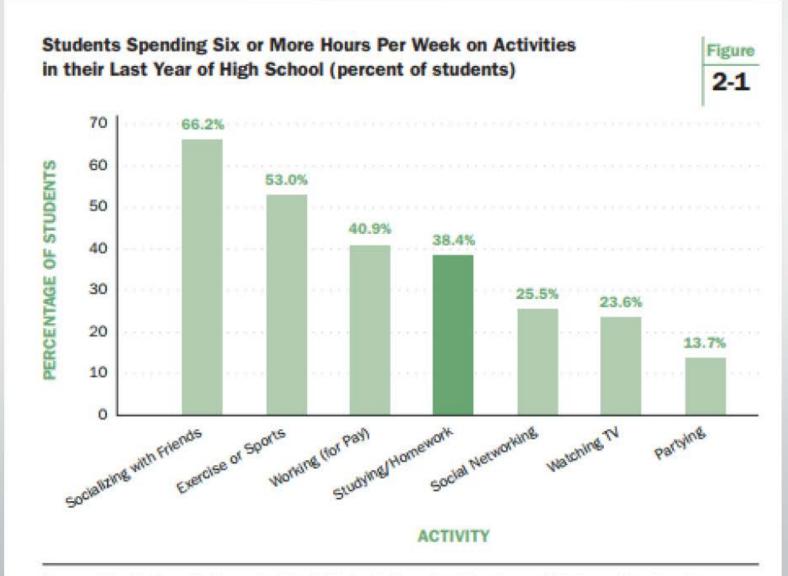


# While almost 73% of the students indicated that doing homework prevents them from getting enough sleep

They also indicated that the following activities also impacted their sleep...

- Socializing with friends (47%)
- Participating in sports (44%)
- Participating in co-curricular activities (57%)
- Spending time on social media, watching videos or playing games (65%)

#### Information from External Research



Source: John H. Pryor, K. Eagan, L. Palucki Blake, S. Hurtado, J. Berdan, and M. Case. \*The American Freshman: National Norms Fall 2012,\* Higher Education Research Institute, UCLA, 2012.

### Research and Survey Results

#### **Pros**

- Teachers use homework as a basis of class discussion (79 %) or to help students achieve mastery (72%)
- Students agree that homework helps them do better academically (53%)
- Students indicated that they were assigned the appropriate amount of work (61%)

#### Cons

 Homework benefits plateau at about 2 hours per night for high school students. Beyond 2 hours, homework may have detrimental achievement effects

(Cooper, 2007)

 Students report receiving more than 2 hours of homework and that homework is a factor impacting sleep.

### **Next Steps**

- Share our findings with the high school faculty
- Work with teachers to reflect on best practices for homework, including providing reflection questions, focusing on big ideas, and creating inquiry projects (Jo Boaler, Mathematical Mindsets)
- Further utilize Google Classroom resources to ensure that the frequency and timeline for homework assignments are clearly communicated to all students
- Support students to utilize time spent on homework most efficiently
- Continue to offer homework help and study skills workshops

### References

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### Committee Members

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#### Round Table Conversations

What aligns with the best practices from the research in your child's homework experience?

•Something positive that I think the school should continue and strengthen

•A question I have or a homework that has made it difficult for my child

