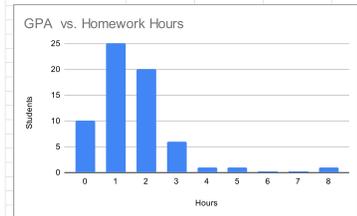


What grade are you in?		What is your current unweighted GPA?		On average how many hours of sleep do you get on a school night?		When you do not get enough sleep at night how do you feel the next day at school?		Do you do any extracurriculars after school?		How many hours do you spend doing extracurriculars after school?	
Grade	Students	GPA	Students	Hours	students	Options	Students	Option	Students	Hours	Students
9th	9	2	1	1-2	0	Ready to learn and be active in class	1	Yes	58	0	10
10th	8	2.3	1	3-4	2	A little tired but still able to focus	40	No	11	1	5
11th	15	2.4	1	5-6	33	very tired and having trouble concentrating	22			2	12
12th	34	2.8	1	7-8	34	about to fall asleep in class and not paying attention	6			3	19
		3	4							4	12
		3.2	4							5	9
		3.3	6							6	2
		3.4	6								
		3.5	4								
		3.6	6								
		3.7	9								
		3.8	10								
		3.9	12								
		4	4								

How many hours do you spend doing homework after school?		Do you think homework hours or GPA has more of connection to your GPA going down?	
Hours	Students	Option	Students
0	10	sleep	34
1	25	Homework hours	35
2	20		
3	6		
4	1		
5	1		
6	0		
7	0		
8	1		



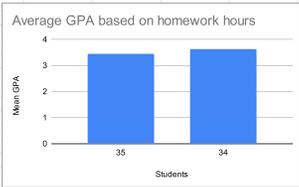
$$0 \times 10 + (1 \times 25) + (2 \times 20) + (3 \times 6) + (4 \times 1) + (5 \times 1) + (8 \times 1) = 100$$

64 Students $\frac{100}{64} = 1.563$

Average homework time is 1.563 per night

The survey results show that most students spend between 1 and 2 hours on homework after school. The most common response was 1 hour, reported by 25 students, followed by 2 hours reported by 20 students. Using the weighted mean formula, the average homework time among students was calculated to be approximately 1.56 hours per night.

Homework group hours	Students	Mean GPA
0-1	35	3.45
2+	34	3.62



Two Sample T Test	
Group	Mean GPA
Low Homework (0-1 hours)	3.45
High Homework (2+ hours)	3.62
Standard deviation group 1	0.35
Standard deviation group 2	0.3
Sample size group 1	35
Sample size group 2	34



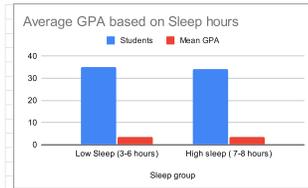
$$(1.5 \times 0) + (3.5 \times 2) + (5.5 \times 33) + (7.5 \times 34) = 443.5$$

$$443.5 / 69 = 6.43$$

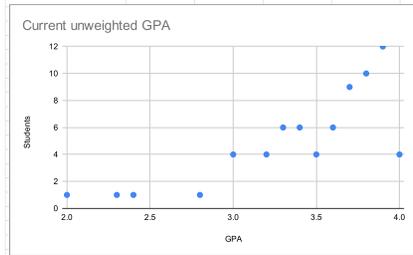
average 6.43 hours per night

The survey results show that the average sleep hours is 6.43.

Sleep group	Students	Mean GPA
Low Sleep (3-6 hours)	35	3.42
High sleep (7-8 hours)	34	3.6



2-sample T test	
Group	Mean GPA
Low sleep	3.42
High sleep	3.6
SD group 1	0.35
SD group 2	0.3
Sample size 1	35
Sample size 2	34



A two-sample t-test was used to compare the averages of two different groups. It helps determine if there is a significant difference between the mean values of the two groups based on the sample data.

Form Summary

What is your gender?

Gender	Percentage
Male	61%
Female	36.6%
Non-binary	2.4%

What is your average screen time per day?

Answer	# of people
0 - 2 hours	12
2.1 - 4	22
4.1 - 6	32
6.1 - 8	6
8.1 - 10	3
10.1 - 12	3
12.9	1
17	1

What is your most used app?

App	Percentage
Youtube	17.1%
Instagram	28.6%
TzZiktok	24.4%

Mobile games	3.7%
Streaming service	8.5%
Other	17.3%

What is your unweighted GPA?

GPA	# of people
1.6 - 2.0	2
2.1 - 2.5	2
2.6 - 3.0	6
3.1 - 3.5	20
3.6 - 4.0	40

I feel satisfied/content with the direction of my future. 1 being strongly disagree and 5 being strongly agree

Level	Percentage
1	3.7%
2	3.7%
3	11%
4	52.4%
5	29.3%

How many hours of sleep do you get each night usually?

Hours	# of people
3 - 4	5
4.1 - 5	5
5.1 - 6	11
6.1 - 7	13

7.1 - 8	28
8.1 - 9	11

Missing School For Sports and the Stress Levels That Come With It

1. How many school days have you missed, due to sports commitments?

0 days - 55 responses

1 day - 15 responses

2 days - 9 responses

3 days - 10 responses

4 days - 9 responses

5 days - 8 responses

6 days - 1 response

7 days - 1 response

8 days - 2 responses

9 days - 1 response

10 days - 2 responses

12 days - 2 responses

22 days - 1 response

2. What is your weighted GPA?

Weighted GPA	Responses
$1.19 \leq x < 1.99$	5
$1.99 \leq x < 2.79$	4
$2.79 \leq x < 3.59$	15
$3.59 \leq x < 4.39$	69
$4.39 \leq x < 5.19$	23

3. What is your academic stress level in relation to the school you miss due to sports commitments?

Low - 55 responses

Moderate - 36 responses

High - 17 responses

Very high - 8 responses

Question 1: How many high school art classes have you taken?

Answer Options: 0, 1, 2, 3, 4.....

Question 2: Are you in the National Art Honor Society?

Answer Options: Yes, No

Question 3: Do you do art in your free time?

Answer Options: Yes, No

Question 4: Did you take any art classes in middle school?

Answer Options: Yes, No

Q1:

0 = 42 people

1 = 17 people

2 = 7 people

3 = 3 people

4 = 2 people

Q2:

67 said *no*

4 said *yes*

Q3:

43 said *no*

28 said *yes*

Q4:

11 said *no*

60 said *yes*

Questions:

Are you in a music program?

- Yes 66.5%
- No 33.5%

If you said yes, which program are you interested in?

- Band 20.2%
- Orchestra 28.2%
- Choir 17.9%
- I'm not in any 33.5%

If your course is point based, what point level are you in?(i.e. band if you do extra and are in Symphonic you are a .4)

- .4 - 37.6
- .3 - 16.8
- .2 - 20.8%

Do you take private lessons?

- Yes -36.4
- No - 63.4

If so how many years? (If you have not taken any private lessons just put ZERO)

Open ended question

1-3 - 21people

4-7 18 people

8-10+ 24 people

Topic: Factors that play a role in an athlete's collegiate commitment decisions

I made questions to analyze and collect data to see which factors played a bigger role in college recruiting in a student's eyes. Here are the questions:

- 1) Do you have potential to play college athletics?
44 people which is 55.7% said yes, 35 people which is 44.3% said no

- 2) Hypothetically, if yes, how important would NIL be 1-5?
1: 15 21.4%
2: 11 15.7%
3: 26 37.1%
4: 9 12.9%
5: 9 12.9%

- 3) Hypothetically, if yes, how important would academics be? 1-5
1: 8 11.1%
2: 0 0%
3: 12 16.7%
4: 21 29.2%
5: 31 43.1%

- 4) Hypothetically, if yes, how important would playing time be? 1-5
1: 7 9.7%
2: 8 11.1%
3: 15 20.8%
4: 20 27.8%
5: 22 30.6%

- 5) Hypothetically, if yes, how important would the level of play be? 1-5
1: 7 9.7%
2: 7 9.7%
3: 18 25%
4: 22 30.6%
5: 18 25%

In your sport are you a starter or bench player?

Starter- 103 responses

Bench- 25 responses

In your sport rank your confidence level on a scale 1-5

1- 6 responses

2- 4 responses

3- 27 responses

4- 58 responses

5- 33 responses

Rank the connection you have with your coach

1- 15 responses

2- 44 responses

3- 69 responses

Rank the connection you have with your teammates

1- 9 responses

2- 43 responses

3- 76 responses

How many years have you played your sport?

1 year- 8 responses

2 years- 9 responses

2.5 years- 1 response

3 years- 11 responses

4 years- 17 responses

4.5 years- 1 response

5 years- 14 responses

6 years- 3 responses

7 years- 1 response

8 years- 9 responses

9 years- 1 response

10 years- 14 years

11 years- 6 responses

12 years- 8 responses

13 years- 8 responses

14 years- 1 response

15 years- 2 responses

16 years- 1 response

1. Are you planning on pursuing higher education?

Yes: 73 responses

No: 9 Responses

2. Do you play an instrument?

Yes: 32 Responses

No: 50 Responses

3. How many hours do you practice an instrument?

0 hours: 51 Responses

1 hour: 5 responses

None: 4 Responses

5 hours: 4 Responses

3 hours: 3 Responses

2 hours: 2 Responses

4 hours: 3 Responses

8 hours: 1 Response

7-10 hours: 1 Responses

6 hours: 1 Responses

2-3 hours: 1 Response

3.5 hours: 1 Response

0.5 hours: 2 Response

4-8 hours: 1 Response

2-3 hours: 1 Response

10 hours: 1 Response

7 hours: 1 Response

4. Do you have a job?

Yes: 32 Responses

No: 50 Responses

5. How many hours do you work a week?

0 hours: 41 Responses

25 hours: 5 Responses

10-15 hours: 8 Responses

16 hours: 2 Responses

20 hours: 3 Responses

8 hours: 2 Responses

50-60 hours: 1 Response

2-3 hours: 2 Responses

4-8 hours: 3 Responses

23 hours: 1 Response

24 hours: 1 response

3-5 hours: 1 Response

48 hours: 1 Response

18 hours: 1 Response

30 hours: 1 Response

How many years skiing and snowboarding	# of students
1-3	15
4-6	22
7-9	14
10-12	13
13-16	7
17	1
# of days per winter skiing/snowboarding	# of students
1-6	46
7-12	10
13-18	4
19-24	6
24-30	5
31-36	1
	# of students
Terrain park YES	35
Terrain park NO	37

Survey responses Ali Kessel

1. What grade are you in?

- 9th- 5 students
- 10th- 5 students
- 11th- 14 students
- 12th- 20 students

2. What is your current unweighted gpa?

- 2.0 - 1 student
- 2.3 - 1 student
- 2.4 - 1 student
- 2.8 - 1 student
- 3.0 - 3 students
- 3.2 - 2 students
- 3.3 - 2 students
- 3.4 - 4 students
- 3.5 - 2 students
- 3.6 - 5 students
- 3.7 - 6 students
- 3.8 - 8 students
- 3.9 - 7 students
- 4.0 - 3 students

3. On average how many hours of sleep do you get on a school night?

- 1-2 hours - 0 students
- 3-4 hours- 2 students
- 5-6 hours - 26 students
- 7-8 hours - 19 students

4. When you do not get enough sleep at night, how do you feel the next day at school?

- Ready to learn and be active in class - 0 students
- A little tired but still able to focus - 24 students
- Very tired and having trouble concentrating - 18 students
- About to fall asleep in class and not paying attention - 5 students

5. Do you do any extracurriculars after school?

- Yes- 39 students
- No- 8 students

6. How many hours do you spend doing extracurriculars after school?

0 hours - 7 students

1 hours - 3 students

1-2 hours - 4 students

2-3 hours - 12 students

3-4 hours- 9 students

5-6 hours- 9 students

7. How many hours do you spend doing homework after school?

0 hours- 5 students

1 hour- 13 students

2 hours- 16 students

3 hours- 3 students

4 hours - 1 students

5 hours- 1 students

6 hours - 0 students

7 hours - 0 students

8 hours - 1 student

8. Do you think sleep or homework hours has more of a connection to your gpa?

sleep - 24 students

Homework hours- 23 students

Question Breakdown of Survey Results:

Does your extended family live out of the state?

Yes- 15

No- 6

How many times per year does your family travel?

1-2: 3 people

2: 4 people

3: 5 people

3-4: 1 person

4: 3 people

4-5: 2 people

5: 1 person

5-10: 1 person

20+: 1 person

Have you traveled outside of the country?

Yes- 20

No- 1

Do you have a sibling who went to/go to school out of the state?

Yes- 8

No- 13

Is cost a large factor in you college decision?

Yes- 10

No- 11

IA RESULTS - 43 Responses

Do you play a sport at Dow High School?

Yes - 27

No - 16

What is your weighted GPA? (Round Ex. 4.35 > 4.4)

1-2 - 1

2-3 - 2

3-4 - 40

What is your gender?

Male - 24

Female - 18

Other - 1

How many sports do you play at Dow High School?

None - 16

1 - 16

2 - 7

3 - 3

4 - 4

5 - 1

If you play a sport, do you feel overwhelmed with balancing school and sports?

Somewhat - 18

N/A - 9

No - 5

Yes - 4

No Answer - 8

Math IA:

1. What grade are you currently in?
 - Freshman: 21
 - Sophomore: 31
 - Junior: 28
 - Senior: 27
2. What is your current weighted GPA?
 - .7-2.7: 5
 - 2.8-3.5: 15
 - 3.6-4.0: 25
 - 4.1-4.6: 51
 - 4.7-4.8: 4
3. How many hours do you work per week?
 - 0: 79
 - 1-10: 15
 - 11-20: 1
 - 21-30: 3
4. How many hours a week do you spend practicing a sport?
 - 0: 39
 - 1-20: 66
 - 20-34: 5
5. How many hours a week do you participate in a club/extracurricular?
 - 0: 38
 - 1-10: 62
 - 11-19: 6

IA Survey Results:

How Many Pets Do You Have?

0-15

1-29

2-29

3-17

4-10

5-8

6-4

7-1

9-1

10-1

12-1

13-2

17-1

What is Your Gender?

Female- 71

Male- 43

Other- 4

Preferred Not To Say- 1

On a scale of 1-5 how much does your pet situation impact your sense of purpose? 1 is extremely, 5 is it doesn't have an impact at all.

1- 23

2- 19

3- 39

4- 19

5- 20

1. What is your unweighted GPA?

GPA	Number of Students
1.0-1.5	0
1.5-2.0	2
2.0-2.5	1
2.5-3.0	4
3.0-3.5	15
3.5-4.0	54

2. What are your daily average hours for extra curricular activities for Dow High?

Hours	Number of Students
0-1	35
1-2	20
1-3	1
2-3	6
2-4	1
3-4	9
3-5	2
5+	2

3. What are your daily average hours for extra curricular activities that are non-school related? (ex: youth group, jobs, etc.)

Hours	Number of Students
0-1	34
1-2	14
2-3	7
3-4	6
3-5	2

5-6	1
6-7	3
7-10	1
8-12	2
10-12	2
12+	4

Student Interest on Living on Mars

Gender

Male - 38

Female - 44

Other - 3

Grade level

9th - 5

10th - 34

11th - 17

12th - 29

Have you taken geo science

Yes -14

No - 71

Gpa

5 - 2

4.6 - 2

4.5 - 2

4.4 - 6

4.3 - 3

4.2 - 3

4.1 - 4

4 - -10

3.9 -6

3.8 - 7

3.7 - 5

3.6 - 3

3.5 - 3

3.4 - 4

3.3 - 1

3.2 - 4

3.1 - 1

3 - 8

2.7 - 1

2.5 - 1

2.4 - 1

2.3 - 1

2 - 2

1.7 - 1

1.4 - 1

1.2 - 2

0 - 1

Would you live on Mars? (If we had the technology)

Yes - 25

No - 60

IB Applications & Interpretations: Survey Questions Results

1. How many times have you been out of the country?
 - 0 times: 11 people
 - Less than 5 times: 18 people
 - More than 5 times: 11 people
2. What climate do you prefer on vacation?
 - Tropical: 18 people
 - Dry: 0 people
 - Temperate: 21 people
 - Continental: 1 person
3. How many people over the age of 18 travel with you?
 - 1 person: 1 person
 - 2 people: 26 people
 - 3 people: 6 people
 - 4 people: 4 people
 - 5 or more people: 2 people
4. How many people under the age of 18 travel with you?
 - No response: 4 people
 - 1 person: 29 people
 - 2 people: 5 people
 - 3 people: 1 person
 - 4 people: 0 people
 - 5 or more people: 1 person
5. How many times a year do you go on vacation?
 - 0 times: 2 people
 - 1 time: 15 people
 - 2 times: 13 people
 - 3 times: 4 people
 - 4 times: 2 people
 - 5 or more times: 4 people
6. How many days do you usually spend on vacation?
 - No response: 1 person
 - Less than 7 days: 21 people
 - More than 7 days: 18 people
7. How far in advance do you plan a vacation?
 - Less than 5 months: 16 people
 - More than 5 months: 24 people
8. What activities do you enjoy most on vacation?
 - Relaxing: 11 people
 - Outdoor recreation: 12 people
 - Exploring: 17 people

Armed Services Recruiting survey

Q1: Would you be likely to join the armed services?

(118 responses) HS: Very likely(7) Likely(14) Not Likely(35) Very Not likely(62)

(16 responses) CAP: Very likely(8) Likely(4) Not Likely(3) Very Not likely(1)

Q2: If you are likely to join, which branch would be your choice?(if not likely to join chose not likely)

(118 responses) HS: Army(2) AirForce(10) Navy(5) Marines(8) Coast Guard(3)

SpaceForce(2) Not likely(74)

(16 responses) CAP: Army(2) AirForce(8) Navy(2) Marines(2) Coast Guard(0)

SpaceForce(0) Not Likely(2)

Q3: What is your Gender?

(118 responses) HS: Male(51) Female(62) Other(5)

(16 responses) CAP: Male(13) Female(2) Other(1)

Q4:Do you have family in the armed services?

(118 responses) HS: Yes(61) No(57)

(16 responses) CAP: Yes(10) No(6)

	# of participants	Average # of Clubs	Average # of Sports	Average # of Music Classes	# of Students in Student Leadership	Total Average Participation
Freshmen	11	2	1.181818182 (1.18)	0.5454545455 (0.55)	1	1.1825
Sophomores	62	0.88709677 (0.89)	0.9516129032 (0.95)	0.5806451613 (0.58)	9	2.855
Juniors	24	0.83333333 (0.83)	0.8333333333 (0.83)	0.70833333 (0.71)	4	1.5925
Seniors	16	1	0.8125 (0.81)	0.8125 (0.81)	0	0.655
Total	113	4.72	3.77	2.65	14	
Average Student Leadership Participation						
Freshmen	0.0909091 (9.1%)					
Sophomores	0.1451612903 (14.5%)					
Juniors	0.125 (12.5%)					
Seniors	0					
Total	0.1238938053 (12.4)%					
Average Club Participation						
Freshmen	0.8181818182 (81.8%)					
Sophomores	0.435483871 (43.5%)					
Juniors	0.416666667 (41.7%)					
Seniors	0.4375 (43.8%)					
Total	0.4690265487 (46.9%)					
Average Sport Participation						
Freshmen	0.6363636364 (63.6%)					
Sophomores	0.5 (50%)					
Juniors	0.5 (50%)					
Seniors	0.5625 (56.3%)					
Total	0.5221238938 (52.2%)					
Average Music Participation						
Freshmen	0.3636363636 (36.4%)					
Sophomores	0.4516129032 (45.2%)					
Juniors	0.4166666667 (41.7%)					
Seniors	0.625 (62.5%)					
Total	0.4690265487 (46.9%)					

IA Results

Do you play sports at Dow?

Yes- 110

No- 54

How many sports are you involved in at Dow?

0 sports- 53

1 sport- 60

2 sports- 38

3 sports- 11

4 sports- 1

5 sports- 0

6 sports- 1

How many days per week do you play sports at Dow?

0 days- 60

1 day- 3

2 days- 6

3 days- 10

4 days- 11

5 days- 40

6 days- 21

7 days- 2

Rate your time management on a scale from 1-5 with 1 being the lowest and 5 the highest

1 star- 2

2 stars- 21

3 stars- 51

4 stars- 65

5 stars- 20

Rate your confidence on a scale of 1-5 with 1 being the lowest and 5 the highest

0 stars- 1

1 star- 7

2 stars- 16

3 stars- 45

4 stars- 64

5 stars- 30

What is your weighted GPA?

1.0-1.9: 1

2.0-2.9: 3

3.0-3.9: 52

4.0 and higher: 108

Have you ever experienced an injury from a sport at Dow?

Yes- 49

No- 115

If yes, how many?

0 injuries- 115

1 injury- 25

2 injuries- 11

3 injuries- 7

4 injuries- 4

5 injuries- 1

Title: Applications & Interpretations - How does Dow's Engineering class and extracurricular's compare to an Engineering degree

- Are you going into an Engineering based career after high school?
- Do you play music, an instrument, or are you in a music class?
- Are you in Intro To Engineering?
- Are you in Dow's Robotics Club?

Are you going into an Engineering based career after high school?

Yes - 3

No - 28

Do you play music, an instrument, or are you in a music class?

Yes - 13

No - 18

Are you in Intro To Engineering?

Yes - 2

No - 29

Are you in Dow's Robotics Club?

Yes - 1

No - 30

Question: What type or genre of music do you typically listen to?

Answers: # of Responses

- Pop: 37
- Hip-Hop & Rap: 21
- Rock: 17
- Country: 20
- R&B and Soul: 3
- Other: 21

Question: Daily, how much time do you typically spend on social media? (Instagram, Youtube, Snapchat, TikTok, etc.)

Answers: # of Responses

- 0 hours: 6
- 0.083333333333 hours: 1
- 0.166666666666 hours: 1
- 0.25 hours: 1
- 0.333333333333 hours: 1
- 0.5 hours: 3
- 1 hour: 9
- 1.083333333333 hours: 1
- 1.5 hours: 5
- 2 hours: 17
- 2.5 hours: 6
- 3 hours: 21
- 3.5 hours: 4
- 4 hours: 16
- 5 hours: 11
- 6 hours: 7
- 6.5 hours: 3
- 7 hours: 1
- 7.5 hours: 1
- 8 hours: 1
- 10 hours: 3
- 11.5 hours: 1

Question: Weekly, how much time do you typically spend exercising?

Answers: # of Responses

- 0 hours: 7
- 0.8333333333 hours: 1
- 1 hour: 8
- 1.1666666666 hours: 1
- 1.25 hours: 1
- 1.5 hours: 1
- 2 hours: 10
- 2.33333333 hours: 1
- 2.5 hours: 1
- 3 hours: 8
- 4 hours: 11
- 5 hours: 12
- 5.5 hours: 1
- 6 hours: 7
- 6.5 hours: 1
- 7 hours: 7
- 7.5 hours: 2
- 8 hours: 10
- 9 hours: 2
- 10 hours: 10
- 10.5 hours: 1
- 12 hours: 2
- 13 hours: 1
- 14 hours: 1
- 15 hours: 4
- 16 hours: 1
- 18 hours: 1
- 20 hours: 3
- 21 hours: 1
- 22 hours: 2
- 24 hours: 2

Question: Weekly, how much time do you typically spend exercising?

Answers: # of Responses

5: 40

4: 53

3: 16

2: 9

1: 2