# PGHS Bell Schedule Task Force Report

Pacific Grove High School Capacity Building Initiative

Fall 2018

# Contents

Bell Schedule Change Initiative	4
Step 1: Identifying Needs	4
Survey Findings Rationale for Moving Forward External Environmental Scanning School start times	9 10
Block or standard schedules	11
Structured Intervention	13
Internal Scanning	
Step 3: Building Capacity and Assessing Competing Interests	16
SWOT Analysis	16
SWOT Findings	16
Step 4: Gathering Data to Define the Current State	17
Step 5: Vetting Data through Site Leadership	20
Step 6: Designing the Desired State	21
Step 7: Creating Evaluation Instruments and Team	23
Appendix	25
References	2.7

# Tables

Table 1: Bell Schedule Task Force	
Figures	
Figure 1: Current Collaboration Schedule	4
Figure 2: Bell Schedule Survey #1	6
Figure 3: Start Time	
Figure 4: Are 48 Minute Periods Too Short?	
Figure 5: Are 101 Minute Blocks Too Long?	
Figure 6: Is the Current Collaboration Time Excessive?	
Figure 7: Should Collaboration Time Change?	8
Figure 8: On the Topic of Tutorial Periods	8
Figure 9: Five Minutes of Bulletin Time	9
Figure 10: Reducing the Block	18
Figure 11: Pushing Back Start Time	18
Figure 12: Tutorials within the School Day	19
Figure 13: Collaboration during the Contractual Day	19
Figure 14: Intervention and Instructional Minutes	
Figure 15: Length of Lab Classes	
Figure 16: Proposed Bell Schedule	
Figure 17: Results of Staff Vote	22
Figure 18: Transitional Bell Schedule for 2019-20	23

#### Bell Schedule Change Initiative

During the winter and spring of 2018, members of a Pacific Grove High School (PGHS) bell schedule task force met to discuss issues related to the current bell schedule, a schedule that was implemented in 2014-15, then adjusted slightly in 2015-16. The changes to the schedule that took place in 2014-15 were the result of a capacity building effort that began in 2010. The adoption of the Common Core State Standards (CCSS) in 2010 effectuated a greater need for teacher collaboration, and there was broad consensus among PGHS staff, at the time, that creating more collaboration time was a priority. As a result, minor changes were made to the schedule between 2011 and 2013, including a lengthening of the lunch period and the piloting of a new collaboration period. By 2014-15 the current bell schedule (see Figure 1) with a weekly 62 minute collaboration was in place.

Figure 1

Current Collaboration Schedule Screenshot of Pacific Grove High School Collaboration Schedule, 2018-19

	BEGINNING BELL	ENDING BELL
WARNING BELL		7:15
Collaboration	7:20	8:22
Period 2	8:27	9:15
Period 3	9:20	10:08
BREAK	10.08	10:23
Period 4	10:28	11:21
Period 5	11:26	12:14
LUNCH	12:14	12:59
Period 6	1:04	1:52
Period 7	1.57	2.45

Honoring the "cycle-of-inquiry" approach to organizational change, a task force was convened during the winter of 2018 to revisit the topic of the bell schedule and to assess the "current state" regarding related issues. There was strong consensus among task force members in support of further reform:

#### **Step 1: Identifying Needs**

Attending to Step 1 of the Action Pedagogy (AP) change model, the task for engaged in dialogue around needs that have arisen since the 2014-15 bell schedule was put into effect.

Feedback from the task force and staff surveys provided the data used to arrive at findings pertaining to Step 1 of the change process. The following four needs emerged from the analysis:

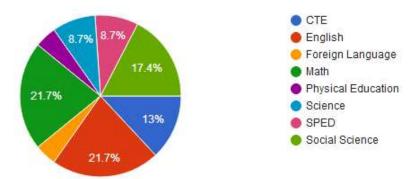
- There is a perceived need shorten the 101 minute blocks in order to conform to standard practice and increase on task behavior.
- 2. There is a perceived need to allot more time for student invention (i.e. study skills, social/emotional curriculum, school communication)
- 3. There is a perceived need to start school later for a majority of students in order to promote healthy sleep habits and increase student alertness in class (it is possible that the action could reduce tardies)
- 4. There is a perception that the current collaboration schedule, which has teacher collaboration set for Mondays from 7:20-8:22am (or as scheduled by department), could be more effective if designed differently.

#### **Survey Findings**

To gather staff input regarding needs related to a potential bell schedule change a Google Forms survey was distributed to the entire staff via e-mail (see Appendix, Exhibit 1). There were 23 total respondents representing approximately 68% of the staff. All departments were represented (see Figure 2).

Figure 2

Bell Schedule Survey #1 Participation by Department



Survey data revealed that 69.6% of the respondents favored a new bell schedule of some form to accommodate the needs outlined above. Staff offered a broad range of suggestions when asked about the issues they felt a bell schedule change could fix. The reasons mirrored the needs identified by the task force. Seven of 16 teachers mentioned a need for a later start time, that "7:15[am] is just far too early for teenagers (and adults)." Several teachers mentioned block versus traditional schedules. Five of 16 offered statements either in support of or opposed to block scheduling. On the issue of the block, some teachers commented that current blocks were too long. Lastly, three teachers remarked that they would like to see the current collaboration time shifted to "within the school day." Quantitative data from the survey helps to draw a clearer picture of the staff positions on the bell schedule issues. Staff were asked to respond on a 5-point Likert scale whether they "strongly disagree" (1) or "strongly agree" (5) to questions pertaining to bell schedule issues (see Figures 3-9). The results are as follows:

Figure 3

#### Start Time

The school day starts too early (7:20 am).

23 responses

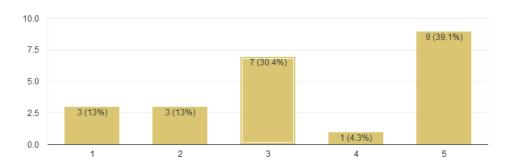


Figure 4

### Are 48 Minute Periods Too Short?

The 48 minute class periods are too short

23 responses

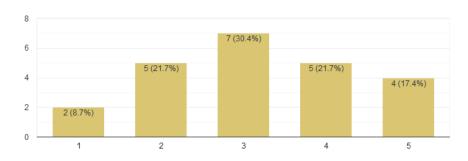
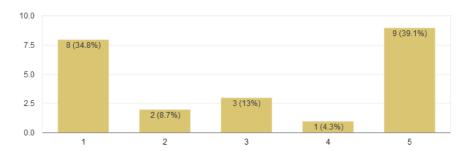


Figure 5

## Are 101 Minute Blocks Too Long?

The 101 minute class periods are too long

23 responses



### Figure 6

#### Is the Current Collaboration Time Excessive?

The 62 minutes of collaboration time per week are too much.

23 responses

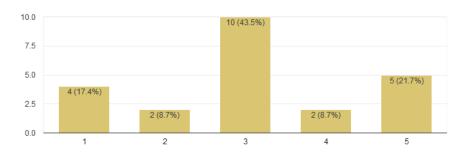


Figure 7

#### Should Collaboration Time Change?

Collaboration should occur during contractual hours. For example, institute an early release day, such as at the Middle School.

23 responses

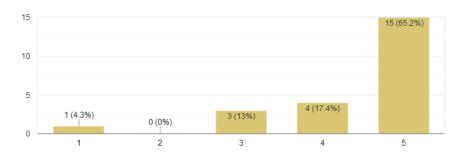


Figure 8

#### On the Topic of Tutorial Periods

Having tutorials (such as Math Support) should be built into the school day.

23 responses

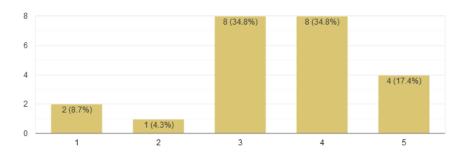


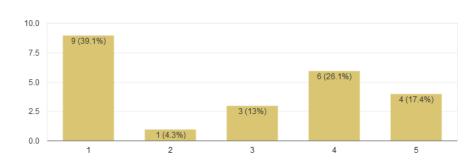
Figure 9

Five Minutes of Bulletin Time

The five extra minutes for the bulletin in the period after break are well

used.

23 responses



#### **Rationale for Moving Forward**

Based on the needs identified by the task force, there was compelling reason to move forward in the transformational change process. Firstly, the identified needs align directly with the school vision. One aim of the vision is helping students lead active, healthy lives. Needs 2 and 3 address this aspect of the vision statement. Secondly, the identified needs are supported in multiple areas of the district's LCAP. One need identified in the LCAP is to "increase student engagement and participation to ensure high levels of achievement." Needs 1-3 outlined above align with this element of the LCAP. Additionally, the need for intervention support mentioned in the LCAP also provides reason for the task force to continue exploring possibilities for creating a more optimal schedule at the high school. The Single Plan for Student Achievement (SPSA) noted a need for increased social emotional support. The SPSA referenced data from the California Healthy Kids Inventory that 18% of 9<sup>th</sup> graders and 16% of 11<sup>th</sup> graders had "seriously considered suicide" at some point. The intervention needs at PGHS are broad in scope. Students could benefit from more support both academically, socially, and emotionally. For these reasons, the task force believes that creating more time to provide an intervention support system for students would have a positive impact on school culture. Designing a new schedule would serve

to build capacity for such a change while at the same time addressing other site-wide needs, such as re-designing the block and collaboration schedules, as well as possibly shifting the start of school.

#### **External Environmental Scanning**

Three issues arose during the initial stage of the task force process that required a deeper investigation of the external environment. The questions compelling the investigation were:

- 1. What does the research say about school start times? And what are the reasons compelling a shift to a later start time?
- 2. What does the research say about the efficacy of a block schedule versus a standard schedule?
- 3. What does the research say regarding structured intervention in schools? Are there compelling reasons to shift school schedules to accommodate structured intervention?

School start times. According to Hafner, Stepanek, Taylor, Troxel, and Van Stolk (2016), lack of sufficient sleep is a pervasive cultural problem in America. Amongst the factors contributing to the problem are poor diets, increased use of technology, lack of physical activity, and psychosocial stress. Regardless of cause, sleep deficiency has now been declared a "public health problem" by the Centers for Disease Control and Prevention (CDC), a problem that has been linked to "seven of the fifteen leading causes of death in the United States" (Hafner et al., 2016). Adolescents are an age group of particular concern when it comes to the problem of sleep deprivation and its effects. Changes in the body's biological rhythms combined with sociocultural factors like social media use and early school start times place teenagers in a high risk category (Hale & Troxel, 2018).

For these reasons, legislators and school officials have begun to take action against the problem of poor adolescent sleep habits. On August 31, 2018, the California State Senate passed a bill requiring that "middle schools and high schools, including those operated as charter schools, ... begin no earlier than 8:30 a.m. by July 1, 2021" (SB 328). The proposed shift to a later school start time at the state level was driven, in part, by the aforementioned research regarding the impact of sleep deprivation in adolescent youth, as well as further research which supports that later school start times can benefits schools by decreasing disciplinary issues, and improving overall school culture, and, in some cases, increasing academic performance (Brown, 2014; Fitzpatrick, 2016; "SB 328: Pupil attendance: School start time," 2018). SB 320 was vetoed by Governor Brown on September 20, 2018 (Racker, 2018). In explaining his rationale for vetoing the bill, Governor Brown stated, "These types of decisions are best handled in the local community" Racker, 2018, para. 4). As a result of Governor Brown's veto, there is no binding legislation that requires school districts to move school start times to later. However, many local education agencies (LEA's) have begun to shift school start times in order to conform to best practices and to honor research findings. For more on the issue of school start times see the Ted Talk by Wendy Troxel: Why School Should Start Later for Teens available at: https://www.ted.com/talks/wendy\_troxel\_why\_school\_should\_start\_later\_for\_teens

Block or standard schedules. The research on the efficacy of block schedules versus standard 50-minute schedules is divided. Trenta and Newman (2002) stated, "Over the last decade, a number of studies and evaluations have been done on block scheduling in which some have found evidence of improved student achievement. Others found no significant improvement or a significant decline in achievement" (p. 55). A study by Lawrence and McPhereson (2000) compared student results on state standardized test scores at two high schools in the same district

in North Carolina – one that uses the standard schedule, and one that uses the block. They found that students who studied at the school that used the standard schedule scored better across the board - in Algebra I, Biology, English 1, and U.S. History (pp. 178-182). Trenta and Newman (2002), on the other hand, used hard data to analyze the relationship between school bell schedule practices and student performance in several areas, including, state standardized test score, grade-point-average, and daily attendance. Their study revealed that block scheduling had a positive influence on academic success at the school site (pp. 54-64).

Despite mixed results regarding the efficacy of schedules on outcome factors, including student performance and teacher perceptions, the research supports that tailoring pedagogical practices to fit school bell schedules does have a positive impact on outcomes (Botstein, 1999; Smith, 2011). Whether using 80 minute blocks or 50 minute standard periods to deliver instruction, classes led by teachers who are well-versed in varying teaching methods, harnessing student attention, and optimizing instructional time are the most effective, regardless of the of the way the schedule is structured.

The Carnegie unit. Any consideration of changing a school bell schedule will be aided by an understanding of the role that the Carnegie unit plays in the determination of instructional minutes. Although the Carnegie unit was conceptualized over a century ago, to this day, academic institutions use the Carnegie unit as a measure of educational attainment whereby, students can "earn credit" by logging hours in a class. The "standard" bell schedule, which consists of a 5 period day with classes lasting from 50 to 55 minutes, finds its origin in the educational reform work of Progressive Era activist Andrew Carnegie who, at the time, was a strong critic of the American school system. The story behind Carnegie's connection to the standard bell schedule is an interesting one. In 1905, Carnegie established The Carnegie

Foundation for the Advancement of Teaching (CFAT) (Piefer, 1979), a charitable foundation whose primary aim was to improve the teaching profession by offering free pensions to professors at nonsectarian institutions of higher learning. The problem Carnegie had to confront in achieving this end, however, was creating a standard by which institutions could qualify. As earlier activists like Dr. Joseph Mayer Rice had already discovered, the concept of higher learning was, at best, a questionable one. So, among other qualification standards, including endowment contributions and faculty size, the CFAT devised a rudimentary means by which to differentiate the institutions of higher learning from other less reputable ones; to do so, it created the Carnegie unit, which essentially set the parameters for defining a standard secondary level course: "A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work." (Piefer, 1979, p. 9) In order to qualify for the free pension program, colleges had to have a minimum entrance requirement for its students of 14 Carnegie Units. Each unit was tantamount to 130 instructional hours, or a course that met for five periods weekly for about 50-55 minutes (Tyack & Cuban, 1995, p. 91). Although unintentional, what the CFAT effectively accomplished by introducing the Carnegie Unit as a standard of quality control was it made the passing of time a priority academic standard. By simply logging minutes, students could earn school credits that would qualify them for college acceptance.

Structured Intervention. Three acronyms have made their way relatively recently into the educational lexicon: RTI and PBIS and MTSS. RTI stands for Response to Intervention, PBIS stands for Positive Behavior Intervention and Supports, and MTSS stands for Multi-tiered System of Supports. All three acronyms refer to "intervention" systems that schools put in place to target student deficits. Both RTI and PBIS use a 3-tier model that define increasing levels of intervention needs, where Tier One describes classroom or whole school intervention, Tier Two

describes small group intervention, and Tier Three describes individually targeted intervention. RTI strategies focus primarily on academic deficits, while PBIS are more behaviorally based (Hannigan & Hauser, 2015). The MTSS acronym has been referred to as an umbrella term that applies to both RTI and PBIS.

Survey data has revealed that the PGHS staff feels that more intervention is necessary. At this point, however, direction is unclear as to what the intervention will look like, how the tiertwo and tier-three supports will be structured, or whether the new system will target behavioral expectations or remain strictly academic. Professional development in this area will be essential.

#### **Internal Scanning**

Through focus group discussions, the bell schedule change team identified several internal drivers of change that, combined with external factors, serve to motivate transformational change efforts. These drivers include:

- A school vision that emphasizes "evidence-based decision-making," a "spirit of inclusion," and an interest in promoting "active and healthy lives."
- A district LCAP that highlights the need to provide support for "targeted student groups"
   and the use of "restorative justice" practices.
- A SPSA that points to a need for more social emotional support systems for students as well as a need to reduce stress loads.
- Survey data that reveals strong staff support for schedule change action to build capacity for larger reform efforts.
- A WASC Action Plan that outlines a need to, "Investigate different options for our bell schedule in order to create tutorial/remediation time within the school day."

#### **Step 2: Teambuilding**

Step 2 of the AP change cycle involves building a change team. The bell schedule task force is team comprised of nine members representing five departments, plus two counselors and an administrator. Care was taken to allow access to all interested staff. Meetings were held weekly on Thursdays at lunch. Staff members that were not part of the core task force attended some of the meetings to give input and receive updates. Members of the team are listed below (see Table 1).

Table 1

PGHS Bell Schedule Task Force

Name	Title	Years of Experience	Years in Current Position
Jenn Erickson	СТЕ	10	5
Michelle Cadigan	Counselor	4	2
Lauralea Gaona	Social Science Teacher	19	6
Larry Haggquist	English Teacher	22	21
Sunny Lee	Math Teacher	12	1
Janine Olin	Foreign Language	13	9
Margaret Rice	Counselor	2	2
Isaac Rubin	Math Teacher	7	6
Shane Steinback	Assistant Principal	10	1

#### **Step 3: Building Capacity and Assessing Competing Interests**

Step 3 of the AP change cycle requires that the team involved consider possible competing interests to ensure that the organization has the capacity and resources to handle the forward momentum of the change process. Because the WASC Action Plan clearly outlined the bell schedule change as an immediate action item, the team did not have major concerns about moving forward with the initiative. However, the team discussed and gathered qualitative data from staff regarding potential hazards (social, technological, economic, environmental, and political--STEEP) prior to and throughout the change process. Hazards identified include:

- New challenges in putting together a master schedule
- After school sports releases being affected by a new schedule
- Extra transportation costs if bus schedules are impacted
- New demands on food services staff
- New learning challenges with Illuminate software

**SWOT Analysis.** As part of the internal scanning process, the bell schedule task force conducted two SWOT analyses with the entire PGHS staff to assess possible **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats pertinent to the change initiative. Staff were asked to give input on SWOT elements in relation to the issue of changing the bell schedule to accommodate identified needs: (see Appendix, Exhibit 2).

**SWOT Findings.** Qualitative data from the SWOT analyses led to following findings, as determined by the change team:

1. Strengths: built-in intervention could provide structured mandatory support time for students with targeted needs, all students would have access to support, the structured

- time would free up lunch for some teachers, there would be a more well-defined means of providing support for students, students homework loads would likely decrease.
- 2. Weaknesses: a built-in system would take away time from current blocks, lab-based classes with less block time would be affected
- 3. Opportunities: students would have more options to get help during the day, the school could add a possible homeroom to help with other issues like communication and make-up work, there is opportunity for staff-development in the area of differentiation and instruction related to teaching block classes
- 4. Threats: some students who don't need intervention might have nowhere to go, truancies might increase if we added intervention to the end of the day, an unequal division of labor between core teachers and non-core teachers might occur, adding a period might affect transportation schedules, adding intention might impact instructional minutes and thereby become a negotiation issue

#### **Step 4: Gathering Data to Define the Current State**

Using the needs identified is Step 1 and Step 3 of the AP change cycle, the bell schedule task force gathered data about those needs via a sitewide survey, *The Bell Schedule Proposals Ballot*, November 8, 2018 (see Appendix, Exhibit 3). Staff members were asked to "agree" of "disagree" with four statements that reflected the four "needs" identified in Step 1 of the Action Pedagogy process. The statements in the survey were:

- 1. The length of the block should be reduced from 101 to 90 minutes.
- 2. The start time for first period needs to be pushed back.
- 3. Tutorials and intervention programs need to be integrated into the school day.
- 4. Collaboration needs to be during the contractual school day.

Thirty-one respondents (91% of the teaching staff) participated in the survey. Results revealed that a strong majority of teachers favored a shorter block period (see Figure 10). Similarly, over two-thirds of respondents were in support of shifting the start of school to a later time (see Figure 11). A strong majority also supported a move to integrate tutorials and intervention programs into the regular school day (see Figure 12). Over 80% of the respondents favored moving the collaboration time to within the contractual school day (see Figure 13).

Figure 10

Reducing the Block

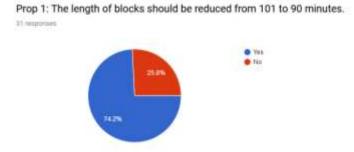


Figure 11

Pushing Back Start Time

Prop 2: The start time for first period needs to be pushed back.

31 responses

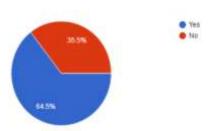


Figure 12

Tutorials within the School Day

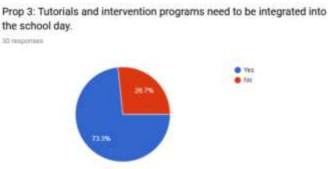
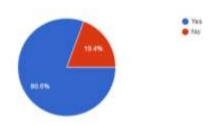


Figure 13

Collaboration during the Contractual Day

Prop 4: Collaboration needs to be during the contractual school day.



The *Bell Schedule Proposals Ballot* yielded strong support of the four proposed changes to be built into the bell schedule, however, qualitative data gleaned from the survey process alerted the change team of several obstacles that might impede the effort to implement all four changes together. For example, fitting a new intervention program into the regular school day would necessitate a reduction in total instructional minutes per class. Also, shortening the block would impact teachers of "lab" (longer period) classes differently than teachers of "non-lab" (shorter period) classes (see Figure 15). As a result of the newly raised concerns, a follow-up survey was administered on November 16, 2018. Teachers were asked whether they would prefer to teach a "lab" class or a non-lab class, with the idea in mind that teacher preferences could possibly be accommodated within the frame of a new, more flexible bell schedule.

Teachers were also asked if they would be willing to sacrifice instructional minutes to

accommodate for intervention/tutorial being scheduled within the school day, as preferences from the prior survey indicated, or if they would prefer intervention to be scheduled in an alternative way. The results from the follow-up survey are summarized below (see Figures 14 and 15).

Figure 14

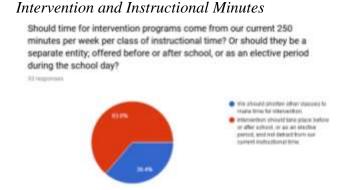
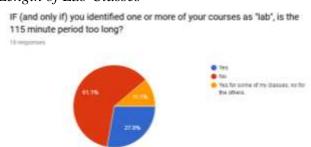


Figure 15

Length of Lab Classes



**Step 5: Vetting Data through Site Leadership** 

Throughout the change process, the bell schedule task force team communicated often and openly with site administration regarding progress of the initiative and potential barriers identified by recursive threat analysis. One member of the task force is a site administrator, and the two lead administrators as well as all site counselors were in regular attendance at meetings. A Google Team Drive that included meeting minutes, survey results, and research elements was carefully managed by a task force leader. Information from task force meetings was brought to

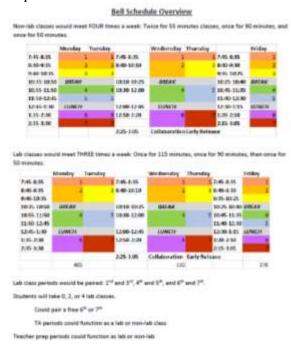
site cabinet meetings to seek further input and to disseminate information to staff through the communication channel of department meetings.

#### **Step 6: Designing the Desired State**

As part of Step 6 of the Action Pedagogy change process, the bell schedule task force gathered and examined bell schedules from several other California High Schools that share similar demographics with PGHS (see Appendix, Exhibit 4). After examining these bell schedules and processing data gleaned from surveys, a lead member of the task force drafted eight workable bell schedules for the team to consider as options to present to the staff. The counseling and administrative staff were brought in to examine the bell schedule options alongside the task force team. After weighing pros and cons of eight sample schedules, a single schedule that combined "lab" and "non-lab" classes was chosen to present to the entire staff as a potential alternative to the current schedule. Staff was asked to give input on whether they would prefer to teach "lab" (longer) classes or "non-lab" (shorter) classes. This information would be retained for future use in creating a master schedule, should the organizational conditions favor a move to a new schedule. At a meeting on February 4, 2019, the staff voted on whether or not they support a move to a new, bell schedule (see Figure 16) that includes "lab" and "non-lab" classes or would prefer to keep the current schedule.

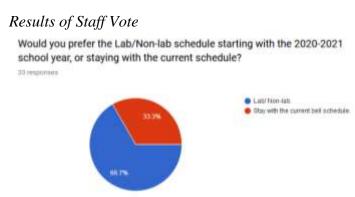
Figure 16

Proposed Bell Schedule



The results of the staff vote on February 4, 2019 revealed that the staff strongly favors a move to a new schedule similar to the sample schedule presented by the task force team. In a vote that recorded a 91% response rate, 66.7% percent voted in favor of change, whereas 33.3% opposed the change (see Figure 17).

Figure 17



#### **Transition Plan**

Because the master scheduling process for the 2019-20 school year is already well underway, it is not feasible to implement the proposed "lab"/"non-lab" by next year. Therefore, it is recommended that all stakeholders district-wide review the proposal, with an aim to implement during the 2020-21 school year. Further feasibility studies will need to take place at the management level to assess whether transportation, food services, and district budgets can accommodate the proposed change.

For next year, the task force has drafted a "transitional bell schedule" that would be easier to implement and that would accomplish some of the goals outlined in this report. This "transitional schedule" would align start times with the proposed "lab"/"non-lab" schedule; it would serve as a pilot study for staggering the end of school times; and it would shift all periods to 50+ minutes in compliance with dual enrollment standards (see Figure 18).

Figure 18

Transitional Bell Schedule for 2019-20 School Year

Mond	ay "A Day"	Tues/T	hurs "B Day"	Wed/	Fri "C Day"
1st	7:45-8:35	1st	7:45-8:35	1st	7:45-8:35
2nd	8:40-9:30	2nd	8:40-10:20	3rd	8:40-10:20
3rd	9:35-10:25				
Break	10:25-10:40	Break	10:20-10:35	Break	10:20-10:35
4th	10:45-11:35	4th	10:40-12:20	5th	10:40-12:20
5th	11:40-12:30				
Lunch	12:30-1:15	Lunch	12:20-1:05	Lunch	12:20-1:05
6th	1:20-2:10	6th	1:10-2:50	7th	1:10-2:50
7th	2:15-3:05				
Staff Co	ollaboration				

**Step 7: Creating Evaluation Instruments and Team** 

The bell schedule task force is currently in the process of developing instrumentation for gathering pre and post test data that will help determine efficacy of the proposed change should

management choose to move the initiative forward. The data collected will be related to the four issues identified in Step 1 of the AP process, *identifying needs*. The four issues were:

- 1. Shorter blocks
- 2. Intervention and support
- 3. Sleep habits
- 4. Teacher collaboration

The task force is interested in learning the degree to which the implementation of a new schedule will impact predicted outcomes. It is important to note that the implementation of the schedule will not be an end in itself, rather a means by which other outcomes—such as student on-task behavior, D and F rates, teacher perceptions about collaboration, and hours of sleep—are affected, hopefully in a positive way.

# Appendix

# Exhibit 1

# Screenshot of Bell Schedule Survey 1 (Needs Assessment)

Bell Schedule Survey #1 2018-19 The following questions were developed based off the findings of the 2017-16 Bell Schedule Committee.	ring questions were developed based off the Findings of the 2017-15 Bell Schoolsle Mark only one ceal.						
Your email address (thappquist@squed.org) will be recorded when you submit his form. Not		1	2	3	4	0	
thegapolist? Sign out	Strongly Claagree						Strongly Agree
1. I am from thedepartment.*  Mark only crea mail.	C. The 101 minute cli Mark only and and	ned Davi			9		
CTE		1	. 2	3	4	5	
English:	Brongly Disagree						Strongly Agree
Foreign Language Mich	7. The 62 minutes of Mark only one avail	collabo	ration (	ime per	week	are too	much.
Physical Education Science		7.	. 2	3		9.	
SPED	Strongly Cleagree						Strongly Agree
Social Science  2. Do you feel there is a need for a new bell schedula?  Mark only one oval.	release day, such	<ol> <li>Collaboration should occor during contractual hours. For example, matitute as se release day, exch se at the Middle School.</li> <li>Start only one and</li> </ol>					
(T) Yes			1	3		1	
○ No.	Bitongly Disagree						Strongly Agree
3. What are the issues on campus that you think the Ball Schedule can fix?	<ol> <li>Having tutorials (truch as Moth Support) should be built into the school day, Mark only one oval.</li> </ol>						
		1	2	7	4		
	Strongly Deagree						Strang's Agree
	<ol> <li>The five catra minutes for the bulletin in the period after break are well used.</li> <li>Mark only one oval.</li> </ol>						r break are well used.
The actroit day starts too early (7:39 am).     Mark only one over.		-1	2	3		1	
1 2 3 4 5	Bitongly Okagine						Strongly Agree
Strongly Deserves Strongly Agree							

# Exhibit 2

# Screenshots of SWOT Analyses

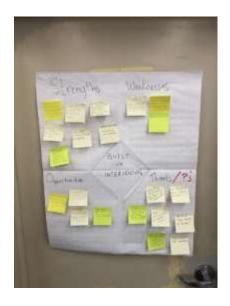
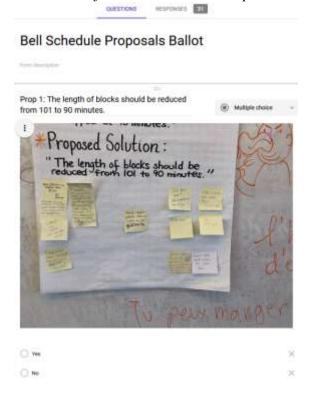




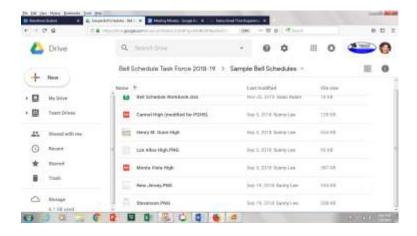
Exhibit 3

Screenshot of the Bell Schedule Proposals Ballot (the 2<sup>nd</sup> Survey Administered to the Staff)



#### Exhibit 4

Screenshot of Google Shared Doc with Sample Bell Schedules



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