

TIME FOR CHANGE?

Findings from a Survey
of Time Use in Schools

Insights Report | 2020



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UNLOCKING TIME

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Introduction

Over the last several decades, education in the United States has experienced numerous transformative shifts ranging from a series of supreme court decisions and federal legislation designed to ensure access for all children, through standards and accountability, to college and career readiness. These shifts in how we think about education have led to changes in many of the priorities that now guide school and district leaders. The content that educators teach and the way they teach it has evolved a great deal over that time.

Yet the way schools structure time for students and staff remains largely unchanged, and many schools and districts are operating on the same set of common approaches to structuring time for students and staff: years that begin in August or September and end in May or June; terms divided into semesters; days that begin around 8 am and end around 3 pm, and that are divided into about 8, 50-60 minute periods. These elements of time could all be levers to increase learning time and differentiate learning experiences for students in ways that boost learning outcomes, but the majority of schools and districts have not yet pulled them.

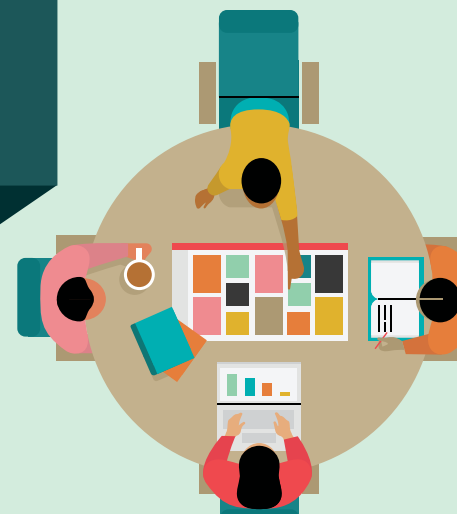
K-12 TEACHERS' PERSPECTIVES

"I would like to have MORE than 47 minutes to be with my students, yet still see them EVERYDAY."

"I would like more regular schedules without weird changes that affect classes disproportionately and more time for grading/assessment/student support."

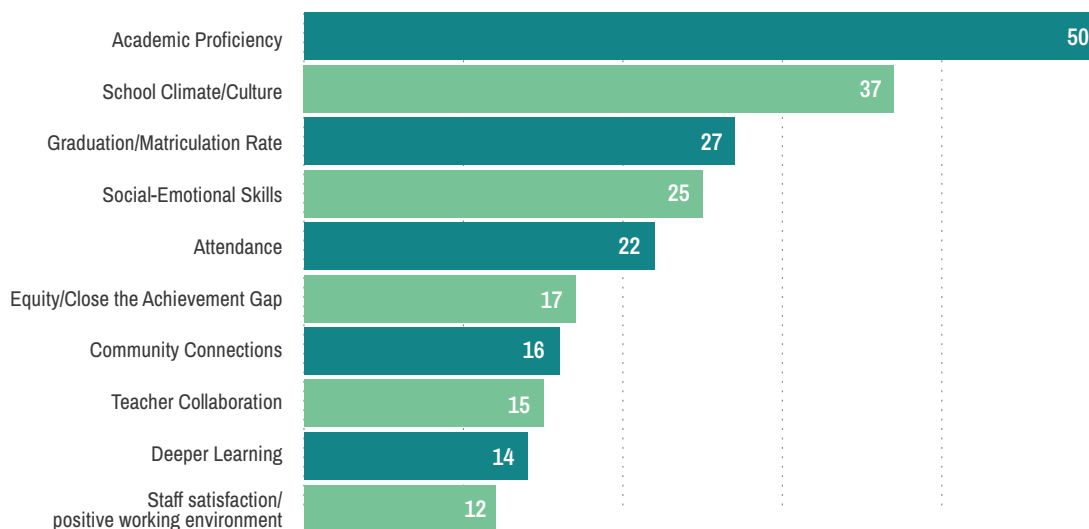
"I would prefer to have a full block schedule. It is so challenging fitting in instruction and work time into short class periods. Students could become engaged and stay engaged during longer classes."

"I would like to see longer classes, but not block scheduling for math!"



As the student population diversifies¹ and the field learns more about what students need—and technology evolves to enable educators to personalize learning activities for larger numbers of students—school and district leaders are changing the ways they meet student needs. As one might anticipate—and as this research reflects—academic proficiency continues to be a top priority for school leaders.

Chart 1. Top ten priorities (by percentage selecting) cited by schools.



3,758 schools indicate their top 3 priorities.

When pursuing these top priorities, instructional strategies are not the only means at a leader's disposal to boost learning and demonstrate improved outcomes. There is tremendous potential to leverage time creatively in pursuit of these goals.

Despite all of the ways in which schools have grown and changed in the last decades, the ways schools structure their use of time has remained remarkably stagnant. Rather than being designed to maximize our ability to address top priorities, time has been allocated based upon logistics and priorities in ways that may not be intentional or setting up our students and staff for success.

One reason schools and districts pursue a relatively limited set of options for school calendars and schedules is the perception that the tradeoffs and challenges to make changes are too great. Typically changes to calendars or bell schedules require years to navigate everything from analysis of the logistics of change to gaining buy-in and support from educators and families, not to mention approval from school boards. When faced with many pressing priorities, district leaders may choose not to invest the time, resources, and political capital in pursuing changes related to calendars and schedules.

Yet, these challenges and barriers do not lessen the potentially transformative impact on teaching and learning schools can have by being more strategic and intentional about how time is structured and used.

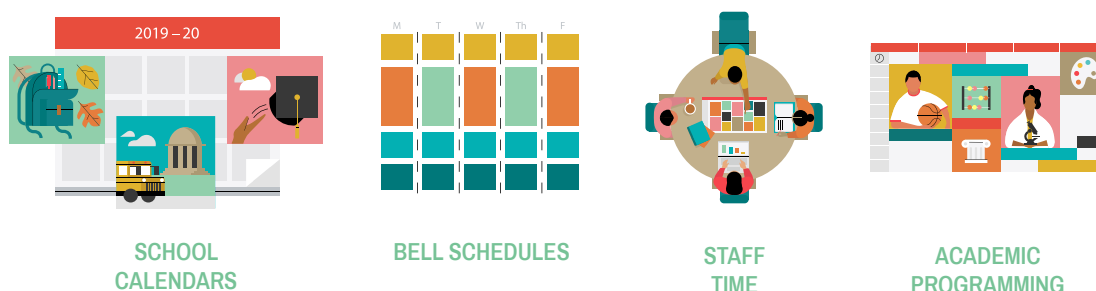
1. See <https://www.pewresearch.org/fact-tank/2014/06/26/u-s-hispanic-and-asian-populations-growing-but-for-different-reasons/>; <https://www.pewresearch.org/fact-tank/2019/07/31/kindergarten-demographics-in-us/>.

A growing number of leaders have recognized the opportunity to consider new ways to structure time for students and staff, and their efforts reflect several important possibilities to achieve their priorities by better aligning time with their strategic goals. With access to creative new ideas and supports, many school and district leaders have also found they have more options and control over how time is organized for staff and students than they previously thought. The table below summarizes alignments between priorities, strategies, and indicators of success.²

Example Intermediate Goal	Example Strategy	Example Indicator of Success
Increase access to advanced coursework.	Align the number of courses provided with the number of students who might take them.	No demographic differences appear across course enrollments.
Increase teacher collaboration time.	Increase the number of class periods in each day.	Teachers develop collaborative plans for student learning playlists.
Create time for project-based learning.	Adopt block periods.	Students complete projects that are high quality.

For those who are prepared to explore time as a strategy for improving outcomes for students—academic and otherwise—this report provides a baseline understanding of how time is structured in schools across the country, along with ideas and examples for opportunities to make use of time a matter of intentional design rather than a legacy feature of how schools work.

School and district leaders have control over four dimensions of time: bell schedules, school calendars (days and years), staff time, and academic programming. The report is organized to reflect findings on those dimensions.



2. See Reimagining Time in School for All Students: <https://learn.ablschools.com/reimagining-time-in-school-for-all-students-whitepaper>.

School Calendars

School calendars look the same almost everywhere.

Some schoolsdistricts have reduced the overall length of summer (about 3%) and about 1% have adopted learning periods that are evenly distributed throughout the year. While the traditional summers off method may remain the best strategy for managing time, there is [some evidence](#) that learning over the course of the school year recedes over the summer—and [further evidence](#) that low-income students of color are more negatively affected by “summer slide” than their more affluent counterparts.

**99% OF SCHOOLS
SURVEYED ARE STILL
RUNNING ON A
TRADITIONAL
“SUMMERS OFF”
SCHOOL CALENDAR**

Bell Schedules

Most schools and districts are using bell schedules that look the same—even though they’re serving different students.

Bell schedules don’t need to be fixed at six, seven, or eight periods—they can be modularized and combined or separated to create more time for some content and less time for other content based upon educator and student needs in order to maximize learning opportunities.

Schools across the U.S. face the persistent challenge of achievement gaps along racial, ethnic, and socioeconomic lines. Despite numerous innovations in ways that instruction is delivered, these gaps largely persist. More exploration of ways to eliminate them is required, but time is one way to create more opportunities to bring students who are behind onto grade-level while also enriching the learning of those already on track.

School time is generally organized in the same semesters, bell schedules, and number of periods across schools and districts nationwide. Perhaps not surprisingly, most schools and districts are experiencing similar mismatch in outcomes across student groups.

We know that not all students learn at the same pace, and that not all content is easily digestible. Nevertheless, we provide course periods in exactly the same increments for the same period of time. That may be wasting time that could be used to move forward—or it may be rushing learning that is fundamental to future success. It could also mean that educators are forced to move on even when some students are not prepared.

Shifts in approaches to teaching and learning have introduced new opportunities for personalized learning, focusing on competency rather than seat time, and enabling students to demonstrate their learning through means other than end of course examinations—all of which give us better data on what students know and can do, and when. By shifting the units of time to be more flexible against these data, we could enable more students to get access to the learning they need when they need it.

Many states still dictate seat time or days in school, which can be a barrier to some changes.³ But, even within those parameters, it is possible to make changes that enable more time spent on top priorities such as learning.

3. 50-State comparison of instructional time policies: <http://ecs.force.com/mbdata/mbquest4ci?rep=IT18A>

For example:

- Consider integrating a [flex time](#) period that enables students to spend more time on their individual needs.
- Organize periods in alternative ways to the traditional 8-period, 50-minute format such as a modified block, rotating periods, or a flex schedule. Explore [Unlocking Time's library of schedule types](#).
- Leverage formative assessment to [regularly regroup](#) students and focus teaching on shared needs of smaller groups—even if you cannot change class periods.
- [Consider Trimester terms](#), which creates more opportunity to make changes to schedules and coursework.

72% OF SECONDARY SCHOOLS STILL RUN ON A TRADITIONAL, STANDARD 5 TO 8 PERIOD BELL SCHEDULE.

86% OF ELEMENTARY SCHOOLS STILL RUN ON A STANDARD PERIOD OR CLASSIC ELEMENTARY HOMEROOM SCHEDULE.

Chart 2. Most secondary schools follow a predictable standard bell schedule.

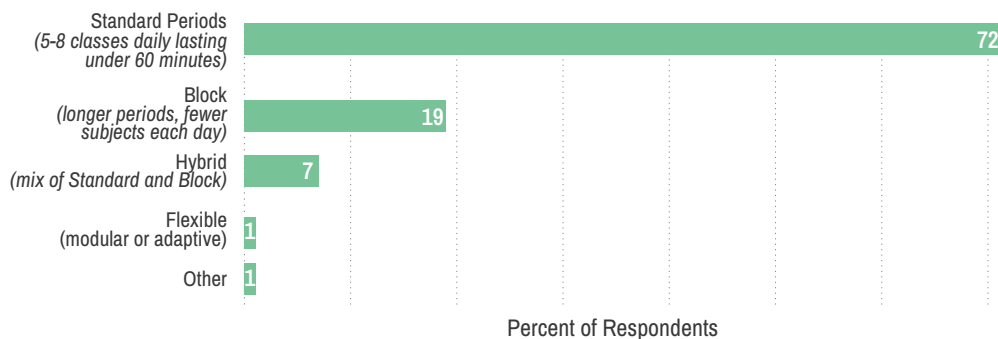
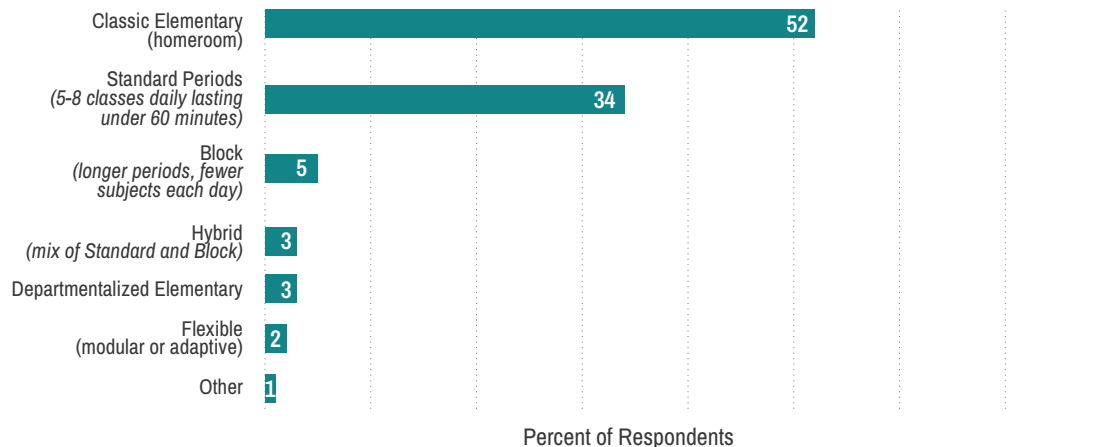


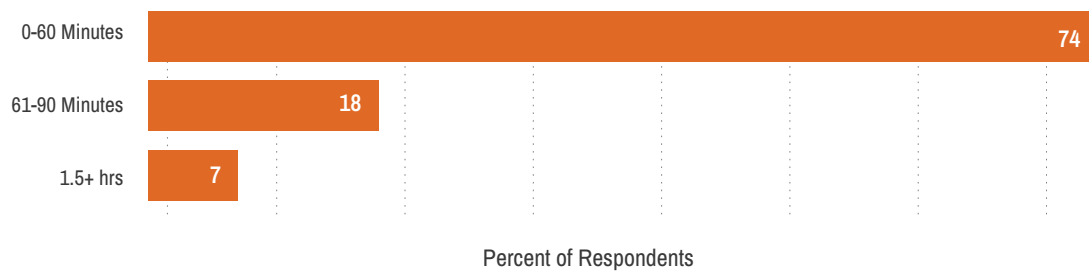
Chart 3. Most elementary schools still follow a classic elementary bell schedule.



Visit Unlocking Time's [library of bell schedule types](#) to learn more about the pros and cons of various options.

ACROSS THE STUDY, 74% OF CLASSES ARE LESS THAN AN HOUR LONG

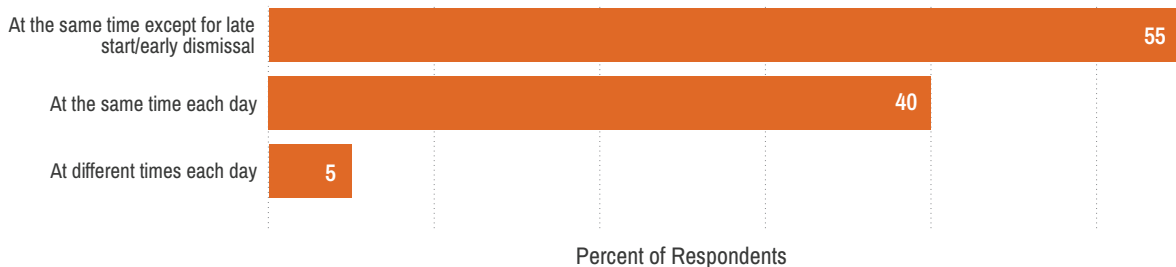
CHART 4: Most schools arrange their classes into short periods, all of the same length.



ONLY 5% OF SCHOOLS ROTATE PERIODS EACH DAY OF THE WEEK.

Most classes are offered at the same time each day, with slight adjustments for early release or late start. Only 5% of schools report rotating periods, a strategy designed to support optimal learning times and students who consistently miss afternoon periods for sports.

CHART 5: Most schools offer the same courses at the same time each day.



Start and End Times

School start and end times don't align with students' developmental needs—
or with the typical family schedule.

Even though data suggest that teenagers benefit from later start times, trends suggest that elementary schools are more likely to start and end later than secondary schools.

Most elementary schools start after 8AM, whereas most secondary schools start between 7:30AM and 8:30AM. Schools consistently close around the same time; most elementary and secondary schools end between 3pm and 3:30pm.

CHART 6: Elementary schools tend to start later than secondary schools.

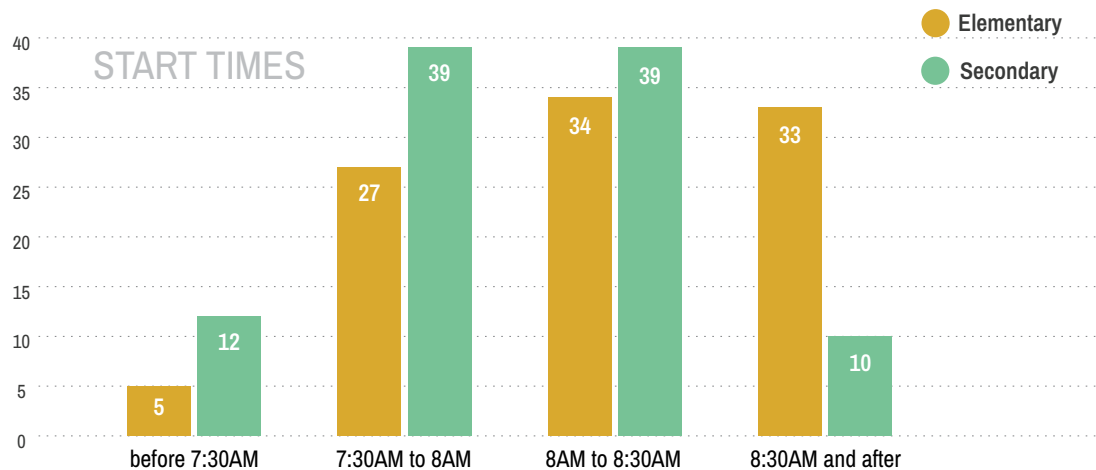
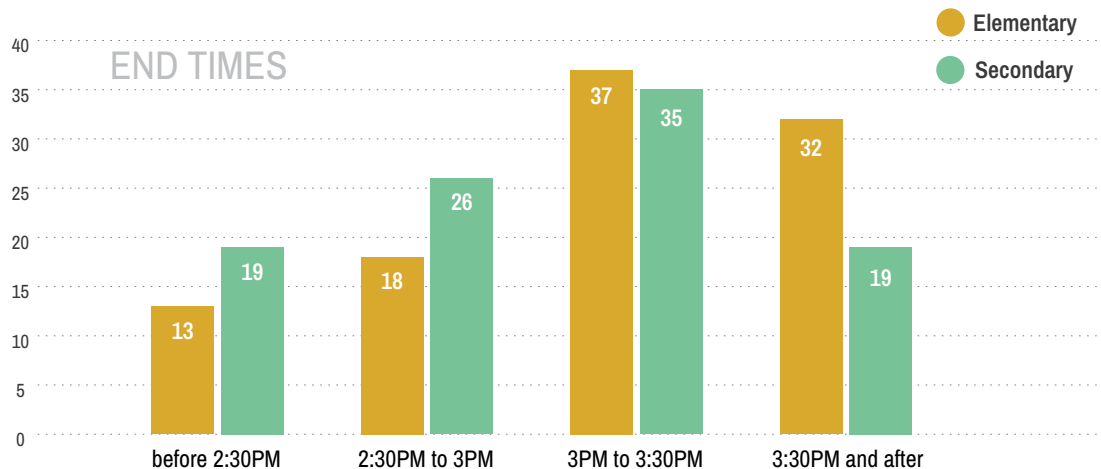


CHART 7: Secondary schools tend to end a little earlier than elementary schools.



"You wake up at 6 a.m. to get ready for work, and if you have teenage children, you wake them up too, because they usually need to get to school by 7:30 a.m. (if not earlier). Unfortunately, kids then sleepwalk their way to classes and really don't start functioning till lunchtime."

— Pamela Thacher, a professor of psychology at St. Lawrence University, and Serge Onyper, an associate professor of psychology at the New York School

Even though most caretakers' schedules typically require them to be at work between 8 and 6 each day, school often begins later and ends earlier. These misalignments can mean families piece together various placements or care for their children that could be time spent learning.

The school day follows a typical trajectory that includes transportation to school, arrival activities, the school day, departure activities and transportation home—sometimes including or followed by after school activities. There are many transition points along the day in which time may be wasted, and students and families may face challenges navigating current schedules. Further, the fixed length of the school day may place unneeded limitations on learning time.

School days have shifted in some locales⁴ to reflect mounting data about development and sleep needs. Many schools still open very early in the day—perhaps before students are at prime learning capacity. But most school days also fail to align with family childcare and transportation availability, which can mean that schools have an opportunity to leverage time when students cannot be at home to maximize learning.

Adult schedules—the restrictions on administrator and educator time—may present the greatest barrier to changes in the school day. Often schedules are negotiated into notoriously difficult to change collective bargaining agreements or dictated by state labor laws.⁵ These issues are not insurmountable, but they can make change a very long-term endeavor. Sports and other afterschool activities may also compete for time in the day, and families may have standing commitments outside of school (e.g., religious activities, volunteering, family time, etc.).

4. California Dreamin: The state becomes the first in the nation to mandate later start times for middle and high schools. Here's why. <https://www.washingtonpost.com/education/2019/10/14/california-dreamin-why-state-is-first-mandate-later-start-times-middle-high-schools/>

5. For examples of items covered in teacher's union contracts, see <https://www.nctq.org/contract-database>.

Potential solutions include:

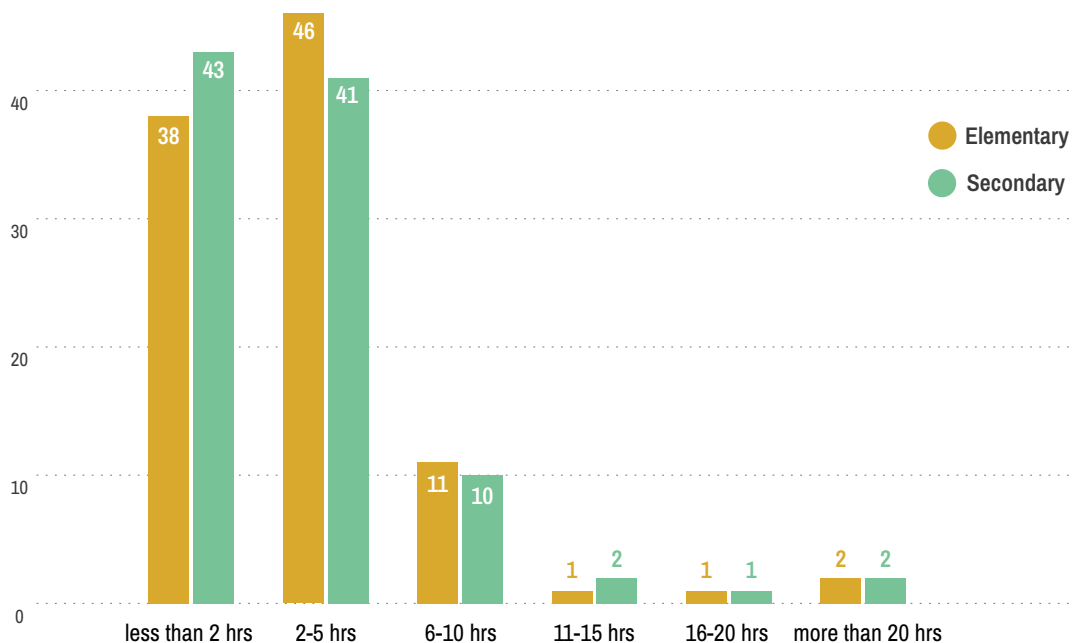
- [Add class periods](#) to give students more choice in their learning—and more learning time overall.
- [Lengthen](#) your school day. Increase learning time by extending the day, and varying teacher schedules so that teachers don't have to spend more time in class even when students do.
- Open school space to before and after school enrichment activities to align with families' ability to pick up and drop off, or meet busses.

Staff Time

Teachers report limited time for valuable collaboration.

The majority of teachers report spending 5 hours or less collaborating with other teachers every week. With median student loads of 131 students per teacher in secondary schools, limited collaboration time doesn't support the need to coordinate student needs across disciplines.

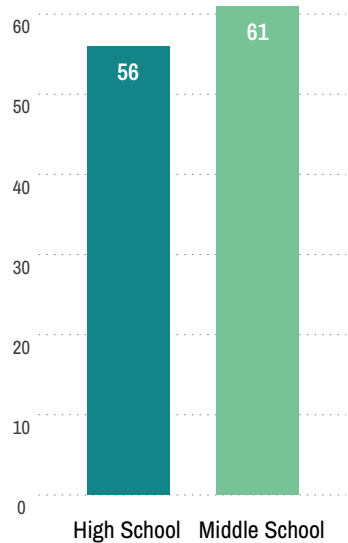
CHART 8: Teachers have less than an hour per day to collaborate with one another.



Number of hours each week teachers report having for collaboration.

In 34 high schools and 18 middle schools, analysis of the master schedule revealed that 56% of teachers have one or more shared free period in their bell schedule per week with another teacher in the same subject and grade level; 44% have no common free period.

CHART 9: Only about half of teachers have a common free period to collaborate with other educators.



Percentage of teachers who have an opportunity within their schedule to collaborate with their grade level or subject area peers on a weekly basis.

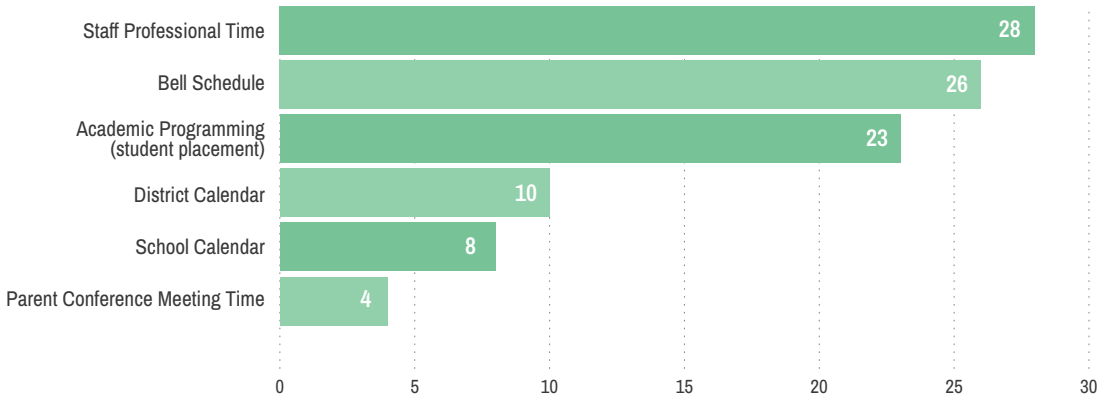
periods and mandates to meet students' learning and course needs. But while meeting students' course needs may seem like an important top priority, creating collaboration time among teachers could make the time that students have with their teachers even more valuable. Collaboration time can also help propel teachers forward in skill development and adoption of strategies that work well with their student population.

Educators and administrators report that competing priorities and demands for time lead to limited opportunities to plan, collaborate, and meet the individual needs of each student. Specifically, teachers report that administrators are driven by different priorities from teachers, and that school districts level even more competing priorities against both teachers and principals. Educators report feeling that a lack of collaboration time makes them feel disrespected as professionals, and it results in educators not having opportunities to learn from one another. In short, educators value collaboration as a core element of their work.

When educators can discuss their own experiences teaching and interacting with their students, it enriches a shared understanding of how students learn and what they need to succeed—which can make the limited time teachers have with students more productive.

Many school schedules are designed primarily around pre-existing class

CHART 10: 28% of teachers surveyed chose “Staff Professional Time” as the aspect of time they would most like to change in their school.

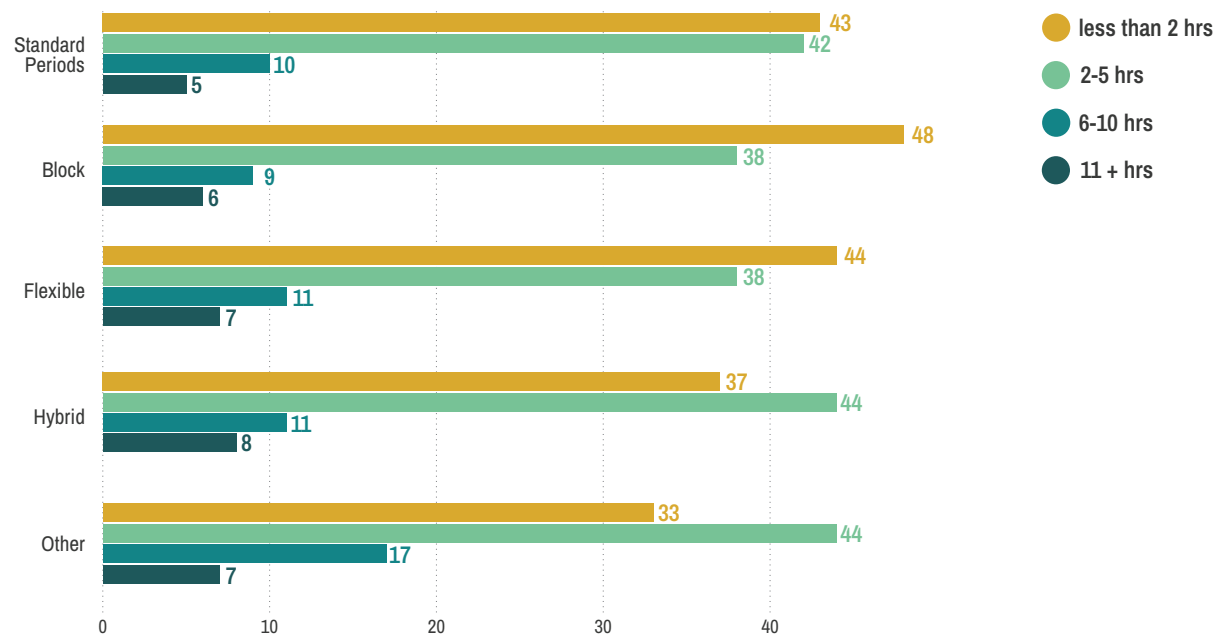


Creating time for teachers to collaborate means finding time when teachers can all be together instead of with their students. Providing time when all educators in a specific grade level or subject can meet together means someone else must be available to be with students and may mean reduced learning time. It can also send the message that teacher time together is more important than instructional time—a message that leaders will need to help stakeholders understand is more about balance and maximizing learning experiences than prioritizing teachers over students.

Possible strategies include:

- Leverage [virtual learning days](#) to give teachers more collaboration time without reducing student learning time.
- Organize schedules so that [students in each grade level are in special classes](#) at the same time, giving teachers in that grade time to meet.
- [Involve teachers in creating the master schedule](#) will empower teachers and enables the teachers and principal to analyze the schedule and find time within it for their goals such as additional teaching time, professional planning time for teachers, and reinforcing learning for students through a day focused on electives.

CHART 11: Hybrid schedule formats are most effective at generating collaboration time for teachers, block schedules are least effective at generating collaboration time.



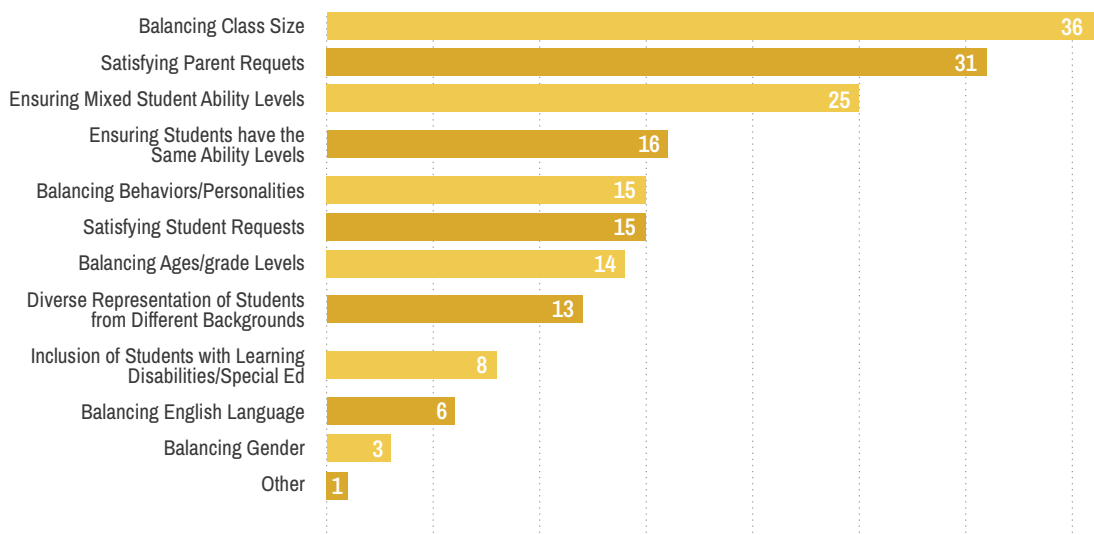
Amount of weekly collaboration time reported by teachers under varying bell schedule formats.

Academic Programming

Academic programming strategies don't prioritize students' equitable access to rigorous coursework.

Educators don't cite satisfying student requests as top priorities in making scheduling decisions. While student needs may actually be a high priority, other important factors compete for attention.

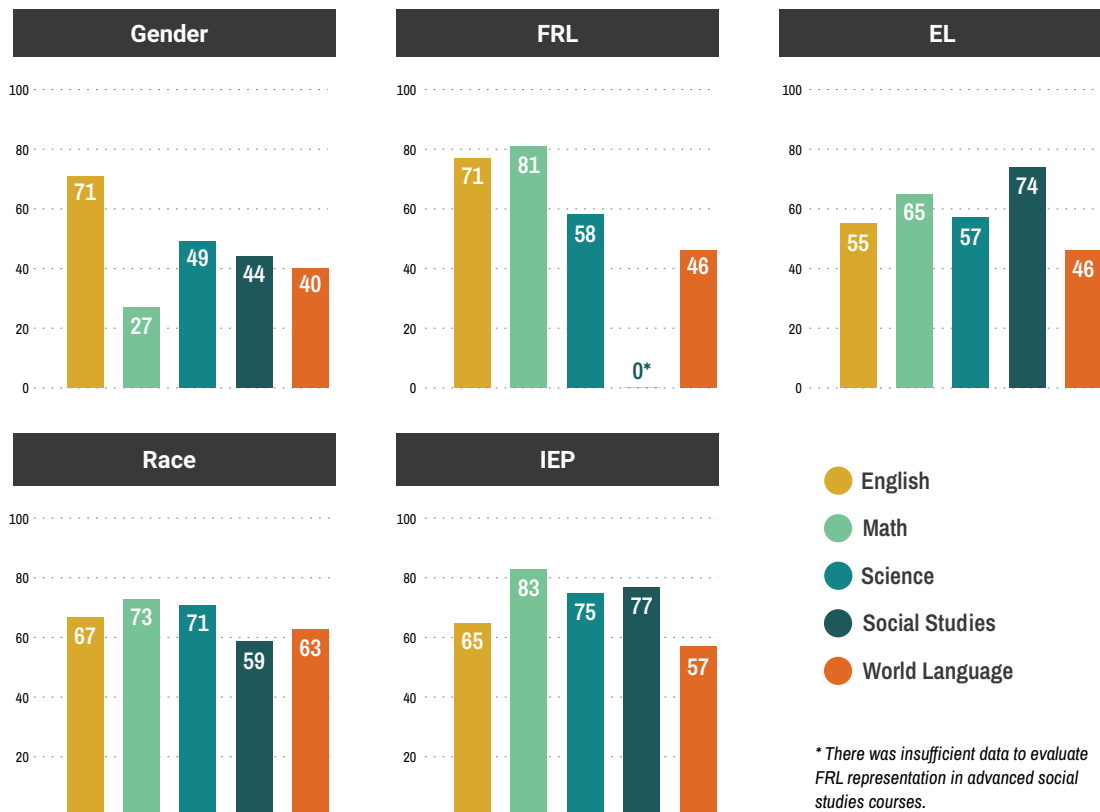
CHART 12: When scheduling students, most schools prioritize balanced class sizes, parent requests and mixed student abilities.



School leaders responses to the question “What do you think matters most for how students are assigned to classes at your school? (select up to two)”

Analysis of the demographic composition of advanced courses in the 34 high school master schedule dataset demonstrated that schools are not prioritizing all students' needs. In an ideal scenario, the composition of the students in advanced courses would be representative of the students enrolled in each subject area. For students in English language learner programs or for students with individualized education plans, some amount of sheltered support may be intentional, but these evidence suggest there may be systematic exclusion of some subgroups from rigorous coursework. Given that most schools report advanced coursework as their primary mechanism for serving the needs of advanced students, these data suggest that advanced students who are also minorities may be underserved.

CHART 13: Across all demographic groups and subject areas, students in advanced courses are not representative of the student population.



Each bar displayed represents the percentage of schools that have significant differences in representation in advanced courses by subject area and demographic group.

Shifting course availability so that more students can have access to rigorous coursework creates opportunities for students to stretch and demonstrate their capabilities in ways that will position them well for post-secondary success.

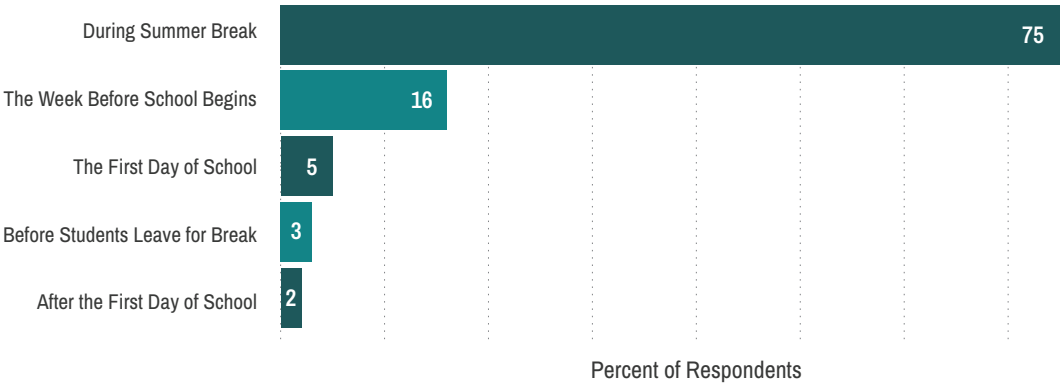
While traditional notions of “tracking” are long out-moded, limiting access to honors, AP, IB or equivalent courses can have a similar effect in terms of creating or closing off opportunity to certain subgroups of students.⁶ To create more opportunities for students to participate in rigorous courses, schools might consider:

- Narrowing course offerings to eliminate courses that are not leading to post-secondary success. (Watch Video: [Focus on Courses for Access to Rigor](#))
- Expanding courses to build pipelines that add new advanced courses and equitable pathways that do lead to post-secondary opportunities, removing barriers and opening doors for students to access advanced coursework.
- Building in the necessary supports for students stretching into advanced courses to ensure success. (Watch Video: [Build Supports for Post-Secondary Success](#))

⁶ See Five Things to Advance Equity in Access to and Success in Advance Coursework, Education Trust.
<https://edtrust.org/resource/5-things-to-advance-equity-in-access-to-and-success-in-advanced-coursework/>

A concerted effort to fulfill student course requests (rather than requirements or recruiting students into more challenging courses) can exacerbate inequalities – which may not be easily remediated because only 3% of schools share schedules with students before the previous year is out. Most share schedules over the summer, but some share early to maximize time for changes and some share later to minimize changes.

CHART 14: Most schools share schedules with students after it is too late to make adjustments for the coming school year.



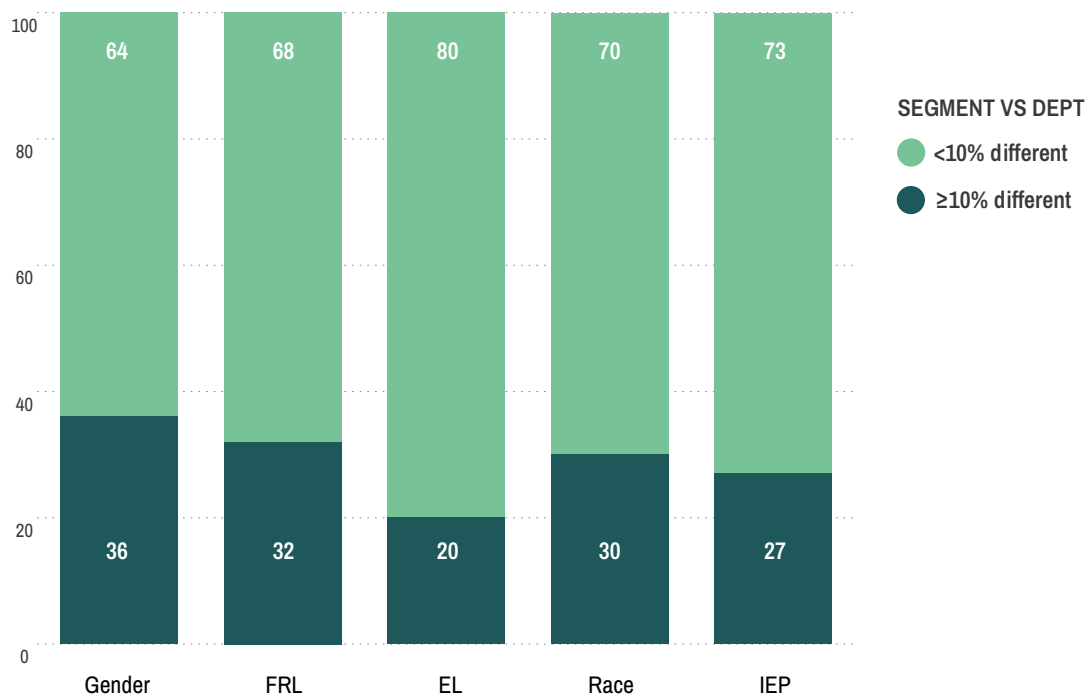
School leaders responses to the question “When do students receive their schedule or class assignments for the school year?”

Based upon reported priorities, one might anticipate that student assignment by teacher roughly matches the demographics of the school but, analyzing the schedules across 9,025 teachers in the sample, roughly 30% of all teachers see a disproportionate number of students in specific subgroups than their department’s average enrollment. While some subgroups of students will be intentionally grouped with a teacher for appropriate educational supports, many teachers are not interacting with a diverse population of students that is representative of the community they serve.

The analysis included an evaluation of the composition of the students that teachers are instructing in their classrooms and whether those groups of students are representative of the students for the rest of the teachers in the same department. The evaluation was broken down across five dimensions: student gender, student FRL status, student ELL status, if the student is a member of a historically underserved race or ethnicity group, and if the student had or has an IEP. Between 20-36% of teachers, depending upon the demographic of interest, see a student population that differs by at least 10% in makeup than the department average. For example if a department has a 50/50 gender ratio and a teacher’s students differ by more than 10% (either >60% Male or >60% Female students across all their courses), that teacher is considered to be teaching a non-representative population of students.

MANY TEACHERS TEACH A GROUP OF STUDENTS THAT DIFFERS MEANINGFULLY FROM THE MAKEUP OF THE STUDENTS ENROLLED IN THEIR DEPARTMENT.

CHART 15: Many teachers do not see a representative population of students in their classrooms, so those classrooms do not match school demographic distributions.



Percentage of teachers whose classrooms are similar (<10% different) or different (>10% different) from the students in their department.

As more data becomes available, it is increasingly essential to leverage that data to both understand the current state and establish priorities for what equitable access to coursework looks like in our schools and communities. School and district leaders need timely access to the right data to make informed decisions about optimal placement of students and staff. See [Scheduling for Equity](#) on [UnlockingTime.org](#).

Leader Perceptions

School and district administrators perceive that barriers to changing their use of time may be too high to overcome—but taking on the challenge could help to achieve their top goals.

School and district leaders cite structural barriers that limit their ability to make changes to school calendars, bell schedules, daily start and end times, and academic programming strategies.

Challenges are not small, and they do require planning, prioritization—but are not insurmountable.

Here are the top five challenges

As described by administrators—and some ideas for how to address them

1. Lack of Shared Vision and Open Communication

- “Between district leaders, school leaders, staff, teachers when it comes to how decisions about time in school is made”
- “Lack of open communication leads to mistrust between the various stakeholders, so when admin wants schedule change, higher likelihood of push-back from others”

2. Path Dependency

- “Small committees composed of ‘old timers’ make changes re time, so new ideas as not valued/included in time scheduling/organization decisions”

3. Current Schedule Fragmentation

- “Teachers too distracted/overworked to embrace/acclimate to scheduling and other changes”

4. Concern re Continuation of Past Dysfunctions

- “By not honoring all needs: Teacher, Admin, Staff, Student, Parent”

5. Lack of Collaboration

- “This is both a scheduling collaboration time problem and a communication problem”
- “Lack of Collaboration Between Teachers and Admin”
- “Lack of Collaboration Between Teachers and Teachers”
- “Lack of Collaboration Between Teachers and Parents”
- “Lack of Collaboration Between District and Teachers”

Top concerns, however, are not directly linked to changing the way they use time, but to concerns about the overall operational health of their organizations. Leaders may find that taking the time to make progress on these barriers not only enables them to make changes to the ways they use time, but to increase overall operational efficiency in ways that help make schools and districts more functional. Structuring time more intentionally around the needs of all students are bound to have a compounded positive effect on student learning outcomes.

Educator Needs

School and district leaders need more and better data about the use of time to help guide improvements to when—and what—students learn.

While time can be a powerful source of improvement as the foundation for pursuit of virtually all teaching and learning priorities, it is too frequently overlooked or dismissed—as evidenced by remarkably few changes to the average school year, day, and schedule over the last several decades and the persistence of commonly used structures across schools and districts of all kinds. The good news is that promising tools and examples of success across a variety of contexts mean that time's untapped potential could be the next major innovation in education.

The field—including educators, researchers, and technology providers—needs to continue investing in making time more flexible for our students and staff. Offering tools and strategies to school leaders to help them adjust time based on the needs of their students is imperative. We need more data on what schools are doing around time to gather evidence around what leaders are already experimenting with.

To get started, school and district leaders might [consider an audit](#) of how their schools are using time and scheduling students to understand equity, access, and whether that time is meeting the needs of all students. Investigate ways to give educators insight into what aspects of time use needs to change, and give them the tools to measure progress on their priorities. Also consider surveying educators about how time is being used now to guide decision-making about changes to prioritize.

Researchers and technology providers can also help. The field needs better tools and analysis to gather information about time use and identify and better understand the impact of strategies that maximize learning opportunities for students and staff. Finally, however it is gathered, schools and districts need access to more and better data on how time is being used to drive innovation and problem-solving.

With more proactive attention to time, the opportunities for increasing access to the learning students (and teachers) need expand exponentially.

About the Authors

Sarah Silverman, Ph.D., Senior Vice President, Whiteboard Advisors

Sarah Silverman collaborates with leaders of innovative organizations to help drive social change. She is a longtime advocate for practice approaches to social justice and data-driven strategies for equity. When she's not writing or analyzing, she's spending time with her family outside.

Kimberly Swan, Head of Abl's Unlocking Time Project

Kimberly Swan loves designing digital products that change hearts and minds. She joined Abl to lead the Unlocking Time project, which empowers K-12 school leaders to rethink how they use time in schools. During her years with design agencies, Kimberly led ambitious digital programs for customers like PG&E, T-Mobile, and Williams-Sonoma. Most recently, she created the Compare and Connect K12 website with EducationSuperHighway which brought price transparency to Internet access for school district leaders and enabled schools to buy more bandwidth at a lower cost. Challenge and adventure are part of her DNA, whether she is backpacking, leading the PTA, or biking down the backside of Hawk Hill on her Sam Hillborne.

Scott Ziolko, Head of Data Science, Abl

Scott Ziolko leads Abl's Data Scientists in building research-backed tools to improve equity in K-12 education. Prior to working at Abl he led teams in delivering adaptive content for K-12 English and Mathematics students and led efforts to better understand and support students in transitioning from high school to community college and from community college to 4-year institutions. In addition to education research he has many publications in medical journals and co-founded a software consultancy. When he steps away from data analyses, he can often be found biking, traveling, and taking photographs.

Boróka Bó, Doctoral Candidate in Demography & Sociology, UC Berkeley

Boróka Bó is a researcher, mathematical demographer and data scientist. She specializes in incorporating a mixed methods approach to understand complex social phenomena, combining multiple qualitative methods with demographic methods and perspectives. Her research focuses on uncovering mechanisms that link sociotemporal disparities to inequalities in well-being. Boróka has held leadership positions in multiple national education organizations, including Timely Inc, the Transylvanian Community Foundation, UCSF's 1st Gen to College Organization, the Alliance for Refugee Youth Education and the University of Colorado Boulder's Staff Council and Health Center. Boróka earned an M.A. in Sociology and an M.S. in Demography from UC Berkeley. She also holds an M.S. in Chinese Medicine and a B.A in Sociology from UC Boulder. When not pondering the minutia of time, she loves traveling, hiking, collecting rocks, painting and playing her didgeridoos.

About the Data

This report relies on data from three sources. Between July 2018 and May 2019, nearly 4,000 schools were surveyed on how they structured time for students and staff, collecting data from a geographically representative sample of US public K-12 schools. This survey contains administrator priorities, goals and a snapshot of the overall structure of time during the school day, week and year. A subset of these administrators also forwarded an anonymous, in-depth survey to their staff (4,155 teacher and support staff responses are included in this report). The second survey queries teachers about a wide range of schedule-related topics of interest to them. Some of these are: time availability for needed collaboration and professional development; primary influences over how their time is organized during the school day; areas they would like to see improvement on; and work-life balance. The above two datasets were linked with publicly available data from Great Schools and the National Center for Education Statistics. This allowed us to assess part of the relationship between equity, county-level economic characteristics and the organization of time in US public schools. The third data source comes from approximately 100 schools that used the Abl Master Scheduler. This dataset contains student demographic information and detailed student and staff schedules. For all three data sources, data collection is ongoing, as more school administrators realize the importance of auditing how time is structured in their schools.

DATASETS

We collected the following datasets to do the analysis in this report:

1. School Survey – a survey of 3,758 schools to collect data on how schools structure time for students within the day, week and year. ([read the questions and aggregate results of the school survey](#))
2. Staff Survey – a survey of 4,155 school staff members at 202 schools to gather opinions from school staff on how time is used in their school ([read the questions and aggregate results of the staff survey](#))
3. Master Schedules – 155 master schedules spanning 2-3 years from 52 schools (34 high schools) were gathered through implementation of the [Abl Master Scheduler](#)

SURVEY PREPARATIONS AND PRE-TESTS

The surveys used were designed by a team of educators, K-12 school leaders, data scientists and survey methodologists including staff at Always Be Learning, Inc. (Abl), and additional domain experts. The school survey includes topics such as approach to teaching and learning, scheduling priorities, length of the school day, and the structure of time during the day, week and year. The staff survey includes topics such as how much time staff has to collaborate and how much staff members agree with how time is structured at their school.

The surveys were further modified, refined, and improved through discussions with the lead researcher and professional organizations, following pre-tests conducted by researchers. The pre-tests were conducted on an availability sample of 95 organic school administrator respondents (who mainly learned about the initiative at professional conferences). During pre-tests, ambiguous questions were modified to better capture the experiences of educators. The flow of the survey was also adjusted to keep participant comfort and time-availability in mind.

DATA COLLECTION

While some users discovered the surveys through internet searches, the bulk of the data collection was carried out by a trained team of 30 surveyors. The interviews were conducted over the phone between 7am and 5pm local time. The data collection was carried out between February 15, 2019 and May 5, 2019. Data entry and cleaning was conducted between May 6, 2019 and July 25, 2019. The lead researcher on the project was responsible for training the surveyors and checking for quality control, both when it comes to data entry and when it comes to following up on non-responses to particular items.

While control procedures did not reveal any systemic problems which might negatively impact the overall quality of the data, quality control procedures and debriefings with the interviewers and respondents indicate that, in some cases, data-collection activities faced some problems. Most of them were related to the length of a few of the available response categories in the attitudinal questions contained in the survey. Although cuts were made after pre-tests, some of the response options were long when it comes to the available options respondents could select from. This is especially salient in the case of the questions querying respondents about their priorities and approach to teaching or learning. Despite these issues, the average duration of the phone interviews was approximately 8 minutes. The average duration of the online survey (for those respondents who chose to complete the questionnaire online) is approximately 3 minutes. Overall, the school survey did not pose a significant temporal burden for respondents, and in many cases, educators noted that they greatly appreciate being solicited for the study. Respondents received no incentives for participating in the study.

Upon completion of the school administrator survey the school leader received an email with a school specific link to allow them to opt-in to completing the staff survey. 185 school leaders chose to share the survey with their staff to answer the additional questions about staff time utilization and preferences. Staff members who completed the second survey did so anonymously with no way to match a response to a specific staff member. The Abl team then produced a custom report with aggregated responses for each school leader who requested the summary.

In addition to the surveys described above, 52 schools (34 high schools) shared master schedules for at least one academic school year. The master schedule data contained the period level detailed staff and student schedules for their school. The master schedule data was acquired by querying the school or district student information system and was utilized for both the research backing this report and in supporting the school in building and improving their next master schedule. If the majority of the students at the school were also eligible for free or reduced lunch then joining this study and sharing their schedule data also made them eligible for grants to offset the subscription to the Abl Master Scheduling software.

SAMPLING METHODOLOGY

The target universe included K-12 school administrators in the United States. According to the National Center for Education Statistics ([NCES](#)), there are approximately 98,000 public schools and 34,000 private schools in the US. The figures provided by NCES fluctuate by approximately 500 schools per year, as struggling schools close and new schools open. The goal of the study was to collect a representative sample of K-12 schools in the US. To accomplish this, in the beginning of 2019, the lead researcher on the project manually downloaded each state's lists of school districts, associated schools and contact information for school leaders. These lists were then cross-checked for accuracy with individual school websites before outreach. However, in select states, private school lists were hard to access. Because of this, we also incorporated a small boost sample, comprised of a nationwide, quasi-random sample of private school leaders.

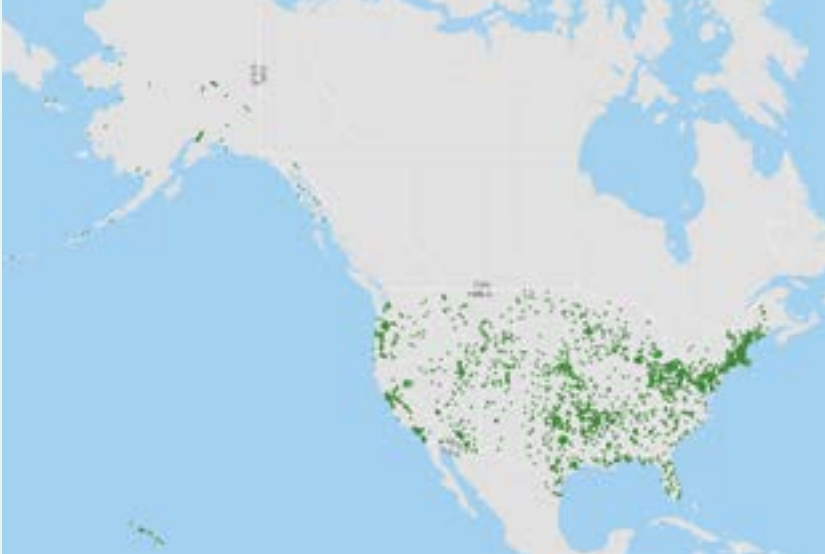
The proposed national sample was collected via a random, stratified, multi-stage process. Stratification criteria were: 1) K-12 schools in every state in the United States plus the District of Columbia; 2) residence area (urban and rural); and 3) size of urban localities. Table 1 presents the distribution of 3793 interviews with school administrators by the stratification criteria mentioned previously. To calculate the number of interviews allocated in each cell of the table we have employed the most recent official statistics produced by the National Center for Education Statistics, downloaded from their website in January of 2019.

Table 1. Unlocking Time Sample Distribution

Locale	Survey Sample %	NCES %	% difference
City	23%	27%	4.7%
Suburban	38%	31%	3.1%
Town	18%	14%	-4.7%
Rural	31%	28%	-3.0%

As Table 1 above shows, when comparing our data to NCES, we slightly oversampled schools located in small towns (4.7%) and in rural areas (3.0%). We slightly undersampled schools located in cities (4.7%) and suburbs (3.1%). Overall, however, our sample closely matches the national school population as a whole.

In each state, school districts were randomly selected. In each school district, we randomly selected K-12 schools to survey. We then called each school, requesting to speak to the principal or with one of the assistant principals. When we were able to reach our target administrators, we conducted the administrator survey over the phone, and encouraged them to also distribute the teacher surveys. We additionally sent personalized follow-up emails, thanking them for their time. Yet, there were times when a principal or an assistant principal were not available. In these cases, we were often forwarded to another available school administrator. In cases like this, we also alerted the principals to our initiative via leaving a voicemail for them to double-check the answers, and we also sent a personalized email doing the same.

Figure 1. Geographic coverage

Our response rates ranged from 50% to 80%, depending on the state and school district in question. On the whole, rural localities were slightly more receptive to completing the survey, with these principals also taking the initiative to alert us that they forwarded our study to principal peers. Figure 1 visually shows the geographic distribution of our nationally representative sample of school surveys.

SAMPLE AND DATASET CHARACTERISTICS

Data collection is ongoing, as more education thought-leaders realize the importance of auditing how time is structured in their schools. But, in order to aid existing efforts at education reforms in K-12 schools in the US, release of the report is accompanied by a public release on anonymized data from 3,758 completed school survey responses. For the sake of this initial public release, we dropped incomplete surveys and those who self-selected into the study from outside the United States. To aid more nuanced analyses, the school surveys were merged with data from the NCES. To maintain respondent anonymity, we have removed school names, addresses, principal names and emails. To enable future research on the topic, we preserved school types, states and locality designations.

ANONYMIZED DATASET

The anonymous public dataset contains the following administrative variables:

- “state” = state the school is located in
- “type” = type of K-12 school (public, private, charter)
- “school_type” = regular, special education, vocational, alternative
- “locale” = 11-City: Large, 12-City: Mid-size, 13-City: Small, 21-Suburb: Large, 22-Suburb: Mid-size, 23-Suburb: Small, 31-Town: Fringe, 32-Town: Distant, 33-Town: Remote, 41-Rural: Fringe, 42-Rural: Distant, 43-Rural: Remote
- “level” = p (pre-elementary), e (elementary), m (middle), h (high)

The rest of the dataset contains items from the school survey.

[Download the anonymized dataset](#)

About Unlocking Time



Unlocking Time is an impact project produced by Abl that helps K12 schools adopt time strategies that fuel student-centered learning. Through support from the Bill & Melinda Gates Foundation, the Unlocking Time website serves as a hub for everything related to time in schools, including a visual encyclopedia of bell schedules, practical time strategies for schools to try, and a library of supporting tools and resources. The site features a free survey tool to help school leaders understand what their staff thinks about their calendars, bell schedule, academic programming, and staff time. Access free tools and resources at UnlockingTime.org.

About Abl



Abl is an education software and services company that is passionate about equity. Abl takes an operations-first approach, understanding access to courses, student equity, and teacher equity through the lens of the master schedule. Abl works with school district leaders to not only evaluate equitable opportunities, but use the results to take action through the school schedule to create systemic change. Learn more at Ablschools.com.



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