



## CHAPTER ONE

# Time

## The Most Common Obstacle to Change in Schools

*At the end of a long day of school visits in Denver, I spoke with Alan Smiley, head at St. Anne's Episcopal School. He talked about the need to balance rapid innovation with maintaining a center of focus for students and adults that does not change. I knew that he had touched on a very important theme, but I also knew I was tired from eight hours of interviews at two schools that day and would not grasp his real meaning without time to reflect. This idea was there, teasing me, just past the range of my understanding, as I wrapped up at St. Anne's, drove out of Denver in a rainstorm, and settled in for the long drive to Kansas City.*

*As it turned out, I did not get to Kansas City that night. My car died just across the Colorado-Kansas border; I will save that tale for later in the book. So it was not until the weekend, having left Kansas on my way to St. Louis, that I finally had the chance to think about time and the pace and rate of change. With a full day to make the drive, I turned off of I-70 East, the major six-lane swath of asphalt that boldly pounds across the American heartland, onto Highway 50, a small two-lane byway which winds through the green, rolling hardwoods and rich bottomlands of the Missouri countryside. Speeds are slower, small crossroad towns flicker by, John Deere dealers and red-roofed, back-road burger stands more common than Arby's and McDonald's. Sometime in the midafternoon I slowed down, pulled over to a deserted*

*picnic stop, and turned off the ignition. As I looked across the cloudy countryside, I finally got Alan's point.*

*The same rapid changes in the world that drive innovation also drive an ever-more- hectic pace of learning. We pile on increasingly competitive college admissions; parents, students, and educators press the pedal to the floor even harder. Yet we all know that we think best, find connections, experience important and sometimes life-changing "aha" moments—not in the rush of the day or when information is swirling at us as we try to grab it, write notes, or complete an assignment—but instead when we take a walk or a long drive, or meditate, or just sit with a cup of tea in the afternoon or at the end of the day. Few schools have time set aside for drinking tea.*

## Our Most Precious Resource

Ask any randomly selected group of American adults, "What do you wish you had more of?" Some will say "money," but almost all will say "time"—the time to do many of the things they would like: visiting with family, pursuing an interest outside of their normal work, helping a charity. The traditional industrial age model of education, as much as any manufacturing assembly line, is slave to the concept of time. Students' lives are segmented into twelve or thirteen yearlong blocks of time according to their age and birthdate. Years are broken down into school time and nonschool time, semesters, trimesters, quarters, summer school, and vacations. Days are strictly bound by the time that schools must start and end within a remarkably narrow set of options. During those days, students and teachers march to the unnatural rhythm of bells and class changes, many still in blocks of 50 or 55 or 49 minutes that suggest that learning is best accomplished in exactly these quanta parsed out according to subject. Some schools have modified the daily routine to allocate two-hour blocks for one subject and not for another, or fewer, longer blocks for all subjects.

Schools that truly challenge their use of time find that it holds the key to liberating innovation. In my research with schools, *by far* the most frequently cited obstacle to meaningful change is time. The two areas for which teachers, administrators, and students consistently

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told me they wish they had more time, or more flexibility in time, were the organization of class time in the daily schedule and time for adults to meet, collaborate, and learn. Both public and private schools are finding solutions to the problem of time. Some create new time, not by extending the school day or year, but by shifting where people have to be during the day. Some reprioritize how time is spent and find that the school survives, and thrives, following what were formerly thought of as impossibly difficult changes to the school's schedule. And we will hear of a ninth-grade student who came up with an elegant solution to one of the most intransigent problems in every school: finding time for teachers to meet and work together on their own learning pathways.

## Why Is Time Chopped Up?

During my visit to a highly respected school in the Midwest, I sat in on a third-grade class. Recognizing the benefits of working across subject matter areas, this school had created a two-hour block of time to teach humanities. Sitting in the back of the class, perched on the tippy edge of a chair made for third graders, I noticed that the well-organized teacher had listed the day's agenda on the whiteboard. She had parsed the day into about a dozen blocks of time. This is absolutely routine at most elementary schools. Student time is chopped up into so many minutes for math, so many minutes for art, so many for reading, and so on.

Not a single educator has ever told me that students learn best in twenty-minute or hour-long blocks of time segmented by subject, yet almost every school structures time that way. Why is school organized this way? I asked this question of many educators I met on my trip, and the answers varied little. The responses fell into two groups: (1) "I need that time in order to teach my students what they need to know," and (2) "It's done that way because that is the way we have always done it." In an overgeneralized way, these two themes characterize the vast majority of responses about why daily schedules are the way they are.

As I discussed in the introduction, there is an enormous disconnect between what educators say are the key learning outcomes they want for their students and the allocation of our precious resources: time, people,

money, space, and knowledge. Educators overwhelmingly agree that the essential qualities of their graduates are things like creativity, love of learning, good citizenship, empathy, effective communication, deep understanding of the challenges that face us in the world, and curiosity. Yet the organizing element of both student and teacher lives, day in and day out, week after week, year after year, is that the allocation of time has nothing to do with those essential outcomes.

Daily life at school is organized this way because that is how we always have done it, and changing the allocation of time can be extremely uncomfortable. Teachers have been hired, trained, labeled, organized, and evaluated

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by how well they control their time, their classroom, and their subject. A change to the daily schedule is a threat to who and what they are as teachers. Can we blame teachers for not welcoming a major change in their daily routine with open arms when this has been the source of their individual and community identity for as long as any of us can remember?

Most educators agree in principle that long periods of time that allow for deep inquiry, accumulation of experience, and iterative practice of critical skills will yield the best long-term results. Ask the same question to teachers and administrators about changing the *specific* schedule of *their* school, and it scares the heck out of them. Even asking the question often generates fear, skepticism, and push-back: “You are trying to steal my time.”

What if we were starting a school from scratch, with no preconditions other than creating the best possible learning environment for students? Would we break the day up into 55- or 75-minute chunks according to the same six or seven age-old subject areas? Would we all move in lockstep at the beginning and end of these increments of time and tell everyone to switch their brain patterns when a bell rings? Would it be set in stone that every student study math or a foreign language for the same number of minutes each day? Nearly every educator I met on the trip told me that learning at schools has evolved in response to time schedules as a precondition, and not the other way around.

## Reimagining the School Calendar

The annual agrarian-driven school calendar has been a fixture of most schools for 150 years. We start school in the fall and take breaks for the major winter holidays, a week in spring, and then summer. Many public and private schools have found opportunities within these “vacation” gaps to offer enrichment programs, which often turn out to be the fun- and passion-filled activities that do not fit into the traditional scaffold of subject-driven curriculum. Some schools have asked why those “other” programs are relegated to summer school or spring break and have reimagined the entire school year schedule.

The Hawken School is a private K–12 school on the eastern outskirts of Cleveland. Educators at the school started talking seriously about time and transformational learning about five years ago, and what they have done to align the use of time with their vision of innovative education has become something of a legend among independent schools in the United States. Head of School Scott Looney asked the faculty to look at their use of time and advise him on how well that usage aligned with their school-wide essential learning outcomes. He got a lot of feedback. At the end of a year he came back to the faculty and pointed out that their own stated goals were for graduates to become “lifelong learners,” “creative and independent thinkers,” “good citizens,” and “people who serve others.” Yet students spent their days in school locked into a rigid routine focusing almost exclusively on science, history, math, and the rest of the traditional subject-driven curriculum.

Scott asked the faculty to create a schedule for the high school division that would align the use of time with the desired learning outcomes. The faculty had three years to get it done; there were no other options. “We held up who we wanted to be as educators, and our daily schedule, and pretty much said, ‘We can’t get there from here,’” Scott told me. “We could not achieve our educational goals when time was ruled by the traditional daily schedule. I did not tell the faculty what the new schedule should look like; I left it completely up to them. What I did say was this: ‘You have three years to

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develop a schedule that aligns with our vision. We are not going to start the school year in 2010 with a schedule that fails to meet that test.”

Hawken now has a remarkable Upper School schedule that includes large blocks of time for “normal” or so-called “rotation” classes, as well as two three-week “intensive blocks,” when the students take just one class in the three weeks. This schedule allows Hawken teachers to create new classes and students to spend much more time off campus, learning in the downtown community. And the new schedule created an explosion of creative thinking and practical innovation. Doug Smith, associate director of the Upper School and history teacher, said that “having students for longer periods of time, up to an entire day, requires teachers to put a lot more thought into how they are constructing any particular class than they had to before.” Doug said that the schedule change really challenged the faculty to reflect on their craft and role as teachers. “You could always go in and wing it for a fifty-five-minute period if you had to, but if you have them for six hours, you can’t do that. When you have students for these more intensive periods of time, you have a richer connection with each other.”

Teacher Dorothy Walthrop told me that the redeployment of time in the daily schedule allows students to access a completely different learning experience. “Now our students have the opportunity to go learn in ways that are very different than traditional education. Before, teachers were not encouraged to do things outside of the classroom because you were taking time away from other classes. There was a big mind shift on the part of teachers from taking a field trip to a really experiential learning opportunity. I see it as a manifestation of more real-world learning. The students learn more about how to collaborate during the intensive courses, and they bring those skills back and use them in the more traditional classes, rather than just working by themselves.”

Scott says, “If you have the courage to push through the initial resistance to change, the other side is lovely, and more often than not you look back and say, ‘What were we so worried about?’ Schools are

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so resistant to change that changes that feel radical, aren't. We only changed one-sixth of the actual schedule, yet people look at it as a revolutionary change in how we use time. In hindsight what we did was evolutionary, not revolutionary. The next big change we go through will be easier because people know we can do it."

## Making Time an Elective

Thousands of American educators know the story of Science Leadership Academy (SLA) in Philadelphia. SLA is a public magnet school in partnership with the Franklin Institute, a major museum and science center in Philadelphia. The school has a rigorous college prep program, though it offers no Advanced Placement (AP) courses. All classes are taught in a project-based environment, and the school community embraces the core values of inquiry, research, collaboration, presentation, and reflection.

SLA students are a cross section of urban America. The students come from every zip code in Philadelphia. About half qualify for free or reduced lunch, which means their families are not financially well off. There are about thirty students in each class, which is the same number as in any other Philadelphia public school. Teacher salaries are the same as those of other schools in the district. SLA gets the same funding from the public coffers as does any other school of the same size. The difference is that 90 percent of the school's graduates go on to four-year colleges.

The schedule at SLA allows students to work with the downtown Franklin Institute. Students and teachers are frequently at school late at night or working together online from home. Jeremy Spry, SLA's assistant principal, succinctly summarized their view of time: "We make 'time' the elective. The schedule allows students to pursue their own passions in blocks of time. What they do with it is up to them, both on campus or with off-campus partners."

Schools are starting to think about and adopt the concept of what has come to be known as "Google time," applying it to new learning opportunities for students as well as teachers. At Google, one of the most innovative

companies on the planet, employees are expected (not allowed—expected) to spend 20 percent of their time doing something that has nothing to do with their real job. They can think, learn, explore, ponder, interact, and hopefully create something that will help the company to succeed in a new and different way. Don Wettrick teaches media at Franklin Community, a public high school outside Indianapolis. In 2012, he had a brainstorm. “If we think the ‘Google 20 percent time’ model makes sense, and want to provide students an opportunity to stretch in that modality, why not create time and space for them each day, one period out of their daily class schedule? What would that do for enhancing creativity, student ownership of the learning space, and that all-critical key to learning, passion?”

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Don pitched the idea to his principal and in 2012 kicked off the “Innovations” class. Students in this elective come up with their own ideas of projects to pursue and then use social media to connect to resources outside of the school—in the community, the region, or anywhere in the world—to help meet their project goals. When I first interviewed Don, one student was pursuing ideas related to autistic learning and iPads. Another was working on a blended fuel project. A third was helping to negotiate contracts for installation of a renewable solar energy system at the school. A few students were struggling to merge projects and passions, which of course one would expect in an authentic program. Not all students immediately take to the freedom of time to think on their own. They have been constrained by class schedules for their entire developmental lives. Classes like Don’s allow them a first glimpse of what the real world, beyond fifty-five-minute slices, looks like and expects.

## Molding Time to Purpose

In most schools, use of time is a nearly sacred driver of life and decisions. Time is viewed as a fixed term in the learning equation, rather than as perhaps the most flexible variable. Some schools have never been captive to this relationship or are starting to break away from it. They deliberately identify the best learning environment for their students and then warp time to fit the learning model.



Poughkeepsie Day School (PDS), a humble independent school nestled in the Hudson River Valley, has been a standard bearer of classic Progressive Era education for decades. PDS has a creative schedule that includes long interdisciplinary blocks of time. To PDS, innovation means keeping aware of the world the students are living in and providing learning and support within that world. Educators at the school feel it is critical for the students to become fully connected to their community, and they use the larger blocks of time in their daily routine to allow these connections to evolve way beyond the occasional field trip. The school has chosen to trade short blocks of time driven by subject content for larger blocks of time driven by broad, deep themes. In every eight-day cycle there is one full day for intensive courses, which can occur on or off campus. The kindergarten class partners with a local farm to learn about the economics, science, and work of growing food. Students go out to the farm, work in the soil, and bring food back with them to school. First-grade students survey and interview shop owners and residents along Market Street in Poughkeepsie to learn about how a city uses resources, what makes a community, and the connection between the economy and jobs. The entire school takes a weekly break called “choice time” when students of mixed ages work on projects or subjects of their choosing and help lead the courses.

Shifting the use of time does not always require changes to the daily schedule. Teachers are reviewing curriculum, units, and the flow of work within a class and finding they can create time even within a traditional hour-long class period. Norfolk Academy is one of the oldest and most respected college prep schools on the Atlantic seaboard. Math teacher Katy Woods told me how educators at the school sat down with the traditional curriculum and rethought what was actually critical for the students to learn. “What we found is that you can actually teach geometry in about six weeks if you have to. Having that flexibility to decide when to do a lecture and when to let the students explore problems allows us to use time in a much more creative way. The students are engaging in projects that actually use math in ways that interest them. They have designed a locker room. They designed new athletic shoes all the way from how to make them to getting celebrity sponsors, to marketing the final product, and all that uses math. We found that by streamlining the content portion

of the curriculum we could create all this time for the students to ‘play’ with math, which is what the real world is all about.”

## Time for Adult Collaboration

A few teachers want to be left alone to teach in ways they are comfortable, to do what they have always done. Most teachers desperately want more time to work with their colleagues and to learn about new teaching practices, to try out new ideas, to constantly develop themselves into better teachers. It is one of the marvelous common threads of the profession: Most teachers got into teaching because they really care about kids and want to do whatever they can to be the best teachers they can be. Teachers tend to be eager to learn, just as they are eager to promote a love of learning in their students. But few schools allocate significant chunks of time for professional development. When teachers are not in class they are preparing for class, grading papers, talking with students, or attending meetings. Most teachers take work home at night and on weekends. Many teachers teach during the summer months or work on units for the following year. The problem of finding time for authentic, productive, collaborative professional development has stumped nearly every school I visited.

The daily class schedule dictates more than just the learning experience for students. The schedule also controls the amount and type of time that adults have for their own learning and professional development. Few adults, particularly teachers, have time to adjust to our rapidly changing world, to learn about new technologies or brain research that impacts how and what we teach, to collaborate with their colleagues at school or across school boundaries, to learn about and adopt successes that others have found. At most schools, teachers meet with colleagues in their respective departments every few weeks, with teachers from their own divisions perhaps once a month, with other teachers in their own schools once or twice a year, and rarely or ever with teachers from other schools. Many attend workshops or a conference once every year or every two years. This poverty of collegial connection is antithetical to everything we know about the importance of networking to organizational innovation. In the business world, companies increasingly live and die based on rapid innovation that

is fostered and nurtured by the time and opportunity for employees to constantly grow. Why should schools be different?

Fortunately, some school leaders are finding all kinds of ways to create time for team-based professional collaboration. The mechanism for creating time in an apparently overloaded schedule is the same: Leaders refuse to let traditional time allocations deprive them of the chance to meet and learn from each other. As with student learning, they treat time as a manageable variable, not a fixed driver.

Lyn Hilt was principal of Brecknock Elementary School, a public pre-K-6 school, when I visited the school, in the rolling hills of rural Lancaster County, Pennsylvania. I spent the morning with Lyn and her teachers, talking about the difficulty of integrating critical learning skills into a curriculum that is largely focused on teaching to standards-based tests. Third-grade teacher Stephanie Ciabatinni told me it came down to Lyn making collegial connections a top priority for her faculty: “She found time for us during the day. We have time every week to get together with the other grade-level teachers, and we decided to use this time to review upcoming units through the lens of the state standard curriculum and figure out how to integrate all of the twenty-first-century skills that we know are critical for our students. By working together we can achieve this in a way we just would not be able to if we were each working just in our own classroom.” Lyn is also one of a growing number of school leaders who not only use Twitter as a way to connect professionally with educators around the country and the world, but also strongly urge teachers to do the same. “I want my teachers connected with people with other ideas as often as possible. Some people see Twitter as a distraction. Used correctly, it is an ideal tool for faculty professional growth. It does not take up a lot of time, yet it connects people who would never have met each other.”

School leaders like Lyn and highly paid scheduling consultants have struggled for years with how to create frequent blocks of time for teachers to work with each other. Following my trip, I was working with the students and faculty of St. Andrews' Episcopal School in Fort Worth for a day, and a ninth-grade student offered a solution that I think can, and should, utterly transform how we solve this problem. I asked the students to take a few minutes to think about how learning takes place on their campus. After a short observational walk around campus, the students itemized

their thoughts and then pitched ideas to each other about how learning might be more closely tied to their own lives and personal objectives.

One of the students commented that adults needed time by themselves to learn, just as students do. He recognized that many of the classrooms at all grade levels were becoming project-based, and good projects are designed to include time for student collaboration, research, making, designing, building, and creating. His group asked, “What if we just aligned the days and times when many classes were doing this kind of independent work? What if, say, every other Thursday for a half-day, all or many classes at the school had ‘project time’? We need time to work on these projects together and don’t really need teachers hovering around at those times. A few adults could supervise a large number of students during these collaborative work times, releasing the rest for large, frequent blocks of professional growth time.” Remember, four ninth graders came up with this idea after just twenty minutes studying the problem!

I have subsequently put this idea in front of a large number of teachers and administrators from both public and private schools. As of this writing, no one has offered any significant reason why this idea would not work.

## Bringing the Outside In

For their own learning, educators have traditionally gone to conferences, read books, taken a course in their credentialing program and . . . that was pretty much it. Each adult viewed himself or herself as a stand-alone learning project. Now we see how powerfully the entire organization can leverage an ever-widening knowledge base by creating time and pathways for adults to share their learning with each other. We see school as a learning environment for adults as well as children. As I say when I facilitate an active learning workshop with educators, the most important mechanism we have for professional growth is to “leverage the brainpower in the room.” Innovative schools are finding

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Pam Moran is the superintendent of the Albemarle County Schools, a 13,000-student district that serves a diverse community ranging from high-tech suburbanites to remote, low-income farms an hour west of Richmond, Virginia. Among the many innovative practices Pam and her team of forward-looking educators have incorporated is a professional sharing program, an in-house annual conference where teachers and administrators from the entire county put on poster sessions about what they are doing in the classroom. Pam and her team showed me the lineup of presentations for the 2012 conference. They had more than 160 separate sessions presented in a single day, a massive outpouring of shared knowledge, each offered by a teacher who is passionate about what she or he is doing in the classroom. These educators don't rely on outside consultants to tell them about the next great thing. They give their own teachers a platform and a little bit of time to share.

I found this poster session mechanism repeated at several other schools I visited, including St. Andrew's Episcopal in Potomac, Maryland, and Parish Episcopal in Dallas. Once or twice a year, the teachers take a half-day or full-day break for professional development, and active sharing is a centerpiece. Teachers who have been to a conference or who piloted a new idea in their classroom share the results. Teachers who have developed a new resource or published a new workbook put them out on display. The school celebrates their creativity. Most schools have built-in professional growth days when the students are absent, so these in-house conferences do not add time to the yearly schedule or a penny of expense to the budget. In fact, for schools that bring in outside consultants to lead a professional growth day, this leveraging of internal brainpower is a significant cost savings.

The Denver Green School (DGS) is another public school we will revisit several times in this book. The school was founded by a unique partnership of veteran local educators that I will discuss more in the chapters on leadership and organizational structures. DGS operates under the oversight of the Board of Denver Public Schools, but also under an innovation initiative that gives the school a great deal of autonomy. The school serves students from a lower-middle class demographic, with 60 percent qualifying for free and reduced lunch. The school is dedicated

to teaching concepts and practices of sustainability in relationship to the classroom, the community, and students themselves, through a host of project-based learning activities.

Developing faculty's comfort with a fluid, dynamic academic program is key to the DGS mission. The school tweaked the daily schedule to allow extra time every day for faculty to meet with each other, and every Friday the students come for only a half-day, with the remainder of that day allotted for faculty professional growth. In addition, teacher contracts include a week in June and two weeks before school starts in the fall that are totally dedicated to collaboration and school coordination issues. The site leaders found money in a tight budget to pay teachers to spend that extra week or two at school, devoted solely to developing themselves into better teachers.

At the College School, a small, early childhood–sixth-grade private school serving middle class families in St. Louis, faculty collaboration and professional development is a top priority of the school. The school's tuition is not substantially more than what local public schools receive in support from the tax base, so time and money are both precious resources. Teachers get released for one period a day and an additional three mornings a week for program and professional development. Teachers are expected to keep a keen eye on best practices and innovative programs at other schools, constantly try out new ideas, and tweak their own programs. Each fall the faculty gets together and creates a school-wide template for professional development to guide common discussions. In 2012, the main headings under which the teachers thought about their growth were “inspiration,” “student care,” and “customer experience.” Teachers help create the template and are expected to show, over the course of the year, how they have expanded their understanding and implementation of the annual themes and goals.

In each of these cases, leaders were able to create time for authentic, sustained, high-frequency professional collaboration without increasing teaching loads, the number of employees, or, for the most part, the number of hours or days that teachers work. These educators

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made choices and came up with creative solutions to reimagine their use of discretionary time during the day and year.

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## REFLECTION

Educators at nearly every school I visited mentioned the need to reevaluate the school's daily schedule to align time with their vision of what our students need to be successful in their futures. Most schools will end up with some form of modified block schedule that gives each teacher a longer period for subject-based learning on a less frequent meeting rotation. Educators at these schools will think that this is the best they can do, the closest they can come without making any of their stakeholders too uncomfortable. It will be a lukewarm solution. A few schools will do what truly forward-leaning schools have started to do. They will set aside the traditional chain that binds us to subject matter and class schedule, line up their learning and teaching priorities, and not rest until the highest priorities get the most time in the day, the week, and the school year.

How can a school team turn time from a limitation into a powerful tool? The process starts with reimagining what our schools would look like if we had no traditions of short, subject-based time slots. As we will see in the penultimate chapter of this book, we need to construct our schools without the preconditions placed upon us by the industrial age model. What if you asked your teachers, students, and parents to design a school with no constraints on time? What might they offer? Schools that have undertaken this exercise never default back to a series of fifty-minute classes. If schools are also able to transcend the rigid boundaries of traditional subjects, they may envision long blocks of time, unconstrained by bells, when students and teachers are free to focus on passion-centered learning, not a fixed quantum of content. Would this kind of school require us to retool how students and teachers engage? Absolutely. But we will not deconstruct the assembly line unless we change the use of time in schools. We can't create more minutes in a day or days in a year, but we can absolutely twist time to better meet our learning goals.

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