

Busting the Myths About

*“Balanced” calendars
have no academic benefit*

AFTER MILLIONS OF American schoolchildren fell behind during the Covid-19 pandemic, some states and school districts are looking at year-round school calendars as a way to recoup lost learning. Typically, year-round calendars don't increase learning time but rather spread school days more equally across 12 months, with a shorter summer vacation and longer breaks throughout the year. That's the approach in South Carolina, where one quarter of districts will use year-round calendars in 2022–23. In Washington State, 45 districts have received state grants to assess the potential and practicality of year-round calendars.

Year-round calendars are often presented as a novel approach to accelerate student learning. But they have been tried and tested for over 50 years, and rigorous research on nearly one thousand public schools in the United States has found that they don't raise academic achievement. Meanwhile, they needlessly complicate life for working parents and teachers.

To school leaders who hope that changing calendars can undo pandemic learning loss, we offer this

**By PAUL T. VON HIPPEL
and JENNIFER GRAVES**



Students start a new school year at Barwell Road Elementary School in Raleigh, N.C. They follow a year-round calendar, with a shorter summer vacation and longer breaks throughout the year.

Year-Round School Calendars



advice: Don't do it. The case for year-round school calendars rests on several myths or misunderstandings, which look plausible when seen from a hazy distance but evaporate when inspected closely through the lens of research. The idea that year-round school calendars are rising like a phoenix from a painful, disruptive pandemic is false. These are zombie reforms, an effort to revive discredited ideas that had been fading for 20 years before the pandemic gave them a reanimating spark.

Myth #1: Year-round schools are open all the time.

Let's start with the name. While it's not technically inaccurate, the term "year-round calendar" can give the impression that children are in school all the time. In fact, the vast majority of schools that use year-round calendars offer 175 to 180 days of instruction—the same as a traditional nine-month calendar with standard holiday breaks and a 10- or 11-week summer vacation.

Historically, the National Association for Year-Round Education has defined a year-round calendar as one with no break longer than eight weeks. Under that broad umbrella, it's useful to draw a line between "extended-year" calendars, which typically expand instructional time to 200 school days or more, and "balanced" calendars, which have the usual 175 to 180 school days but rearrange them—shortening the summer

GERRY BROOME / AP

vacation and extending fall, winter, and spring breaks.

Extended-year calendars are rare in the United States, where less than one tenth of one percent of elementary schools offer more than 180 school days. Nearly all year-round calendars in the U.S., including those used in South Carolina and under consideration in Washington, are balanced calendars with 180 school days at most.

While there are several options for balanced calendars, the most popular is the 45/15 calendar (see Figure 1). It includes four nine-week quarters of 45 school days followed by 15 school days off in the fall, winter, and spring, as well as a six-

calendar to maximize classroom space, which saved half a billion dollars in construction costs. During the Great Recession of 2008–09, Clark County’s population plateaued, and the district switched to a traditional nine-month calendar. It reinstated multi-track calendars after the economy recovered and enrollment growth resumed.

Opponents of year-round calendars often have economic motives, as well. Parent groups who oppose year-round calendars often make common cause with summer camps and amusement parks, whose prosperity depends on teenage workers and children being out of school for months in the summer.

The idea that year-round school calendars are rising like a phoenix from a painful, disruptive pandemic is false. These are zombie reforms, an effort to revive discredited ideas that had been fading for 20 years before the pandemic gave them a reanimating spark.

week summer break. The 45/15 calendar has 180 school days. Until the mid-2000s, there also was a year-round calendar called Concept 6 that scheduled only 163 school days split across six blocks throughout the year. Each school day was slightly longer to preserve the number of hours in school.

Myth #2: The main goal of year-round calendars is to help students learn.

Most public conversation about balanced calendars assumes that they are designed to help students learn. In fact, over the past 50 years, a major reason districts have adopted balanced calendars is to address overcrowding and save money.

Cost savings are possible when schools use balanced calendars in a “multi-track” fashion, in which students are divided into three or four groups and attend schools on a staggered schedule. Consider the four-track 45/15 calendar used today in more than 50 elementary and middle schools in the Wake County Public School System in North Carolina. For three weeks in July, students in tracks A, B, and C are in school while students in track D are on vacation. Then, for the next three weeks, students in tracks A, B, and D are in school while students in track C are on vacation. The pattern repeats throughout the year. In this way, a school building designed for, say, 750 children can serve 1,000 students without installing classroom trailers in the parking lot.

Multi-track calendars were popular in the 2000s in districts experiencing rapid population growth. Take Nevada’s Clark County, which includes Las Vegas and its surrounding areas. Student enrollment in the Clark County School District doubled between 1994 and 2008, making it the fifth-largest district in the country. The district adopted multi-track

We were skeptical that summer camps and amusement parks could exert much influence on education policy—until 2011, when an Ohio state legislator contacted one of us to say that Cedar Point, a massive amusement park outside Cleveland that is often called the “roller coaster capital of the world,” was lobbying for a bill to effectively outlaw year-round calendars by requiring all Ohio public schools to start after Labor Day. The bill did not come to pass, but similar laws restricting school start and end dates have passed in 16 other states.

Myth #3: Year-round calendars are new.

Reporters and advocates often portray year-round calendars as a fresh, untried reform. In fact, various types of extended and staggered calendars were tried throughout the 20th century. A multi-track 45/15 calendar was first adopted in the late 1960s and early 1970s in suburban districts like Hayward, California, and Valley View, Illinois, where enrollments were surging as families left nearby cities and the last cohorts of the baby boom entered elementary school. Meanwhile, educators and representatives from across the U.S. met in 1968 for the first National Seminar on Year-Round Education. By 1972, the National Association for Year-Round Education had been launched, and more than 900 participants attended the 4th National Seminar on Year-Round Education. A 1973 survey conducted before the 5th National Seminar found that 100 districts with more than 374,000 students were using or planning to use year-round calendars. Most were 45/15 calendars adopted to make better use of space.

Multi-track calendars became especially popular in California in the 1990s, when a combination of state laws

made it hard to serve growing student enrollments in any other way. School construction had been sharply limited by Proposition 13, which had capped property tax increases at 1 percent annually since 1978, and by state rules requiring local school bonds be approved by a two-thirds supermajority. Then, a 1996 law capped K–3 class sizes at 20, compelling districts to hire 25,000 new teachers.

How could districts shrink class sizes and find classrooms for new teachers without putting up new buildings? Multi-track calendars, including Concept 6 calendars with only 163 school days, seemed to offer a solution. But they weren't district leaders' first choice. Administrators described multi-track calendars as "strictly a facilities decision" in media reports quoted in a 2003 paper by the Institute for Democracy, Education, and Access at the University of California, Los Angeles. That review also quoted California's former state superintendent saying, "schools didn't move to it because they were trying out some educational innovation. It was out of desperation."

Myth #4: Year-round calendars are poised for growth.

Often, public discussion of year-round calendars implies that they are a new idea and, by extension, are likely to grow in popularity. In fact, until the pandemic, the prevalence

of year-round calendars had been declining for 20 years. Nationwide, the percentage of schools using a year-round calendar fell to 3 percent in 2017–18 from 6 percent in 1999–2000 (see Figure 2). Much of the national trend was driven by California, where the percentage of K–5 schools using a year-round calendar fell to 7 percent in 2018–19 from 26 percent in 1998–99. Virtually all of the decline was in schools using multi-track calendars, especially Concept 6 schools. There were especially sharp declines between 2000–04 and 2011–12.

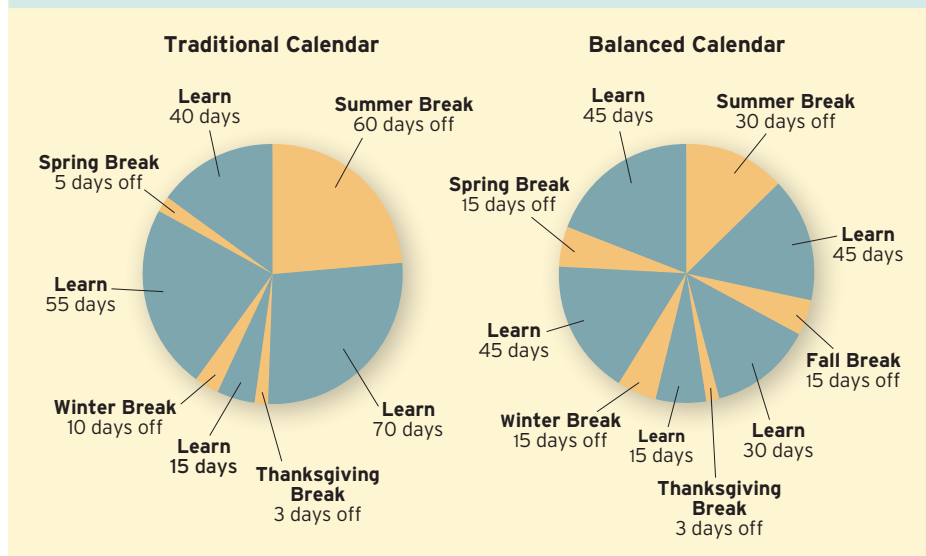
In California, as with the rise of multi-track calendars in the 1990s, the decline of multi-track calendars followed several changes in state law. In 2000, a state referendum made it easier to pass school bonds. In addition, civil-rights groups filed *Williams v. California*, which became a class-action suit alleging that inadequate funding, crowded facilities, and Concept 6 calendars concentrated in schools serving low-income, predominately Hispanic communities were depriving children of an adequate and equitable education. In 2004, the state settled the case and abolished Concept 6 calendars. State referenda in 2002 and 2004 authorized more than \$21 billion in school construction, which reduced the need for other multi-track calendars.

Around that same time, revenues of the National Association for Year-Round Education declined dramatically. In 1997, the

nonprofit organization reported revenues of \$734,834 from a conference, seminars, membership fees, and other sources. By 2009, it reported less than \$2,000 in revenues, and the executive director described it as "largely dormant" on the organization's annual tax return. The organization has not reported revenues to the federal government since 2008, and its website lists no employees apart from a part-time executive director. Nevertheless, it is often treated as an authority on year-round calendars and their effects.

Shorter Summers, Longer Intercessions in "Balanced" School Calendars (Figure 1)

Compared to traditional nine-month school calendars, year-round calendars feature shorter summer vacations and longer breaks throughout the year. The most common, the "45/15" balanced calendar, divides 180 school days into four 45-day quarters, separated by and three 15-day breaks and a monthlong summer vacation.



Myth #5: Year-round calendars increase learning.

Proponents often claim that balanced calendars increase learning. For example, an FAQ page published on the Washington State Office of Public Instruction's website claims that "Schools that follow a balanced calendar tend to have higher achievement scores." But claims like that are hard to reconcile with rigorous research. As is often the case in education, you can

cherry-pick a study to support any position you like, but a lot of studies aren't very good. And for more than 20 years, the most rigorous studies have uniformly found that year-round calendars do not increase learning—and may even, in some cases, reduce it.

In a 2003 meta-analysis, Harris Cooper and his colleagues reported that the “quality of evidence available on modified [year-round] calendars leaves much to be desired.” They found that most studies relied on small samples and did not control adequately for confounding differences between year-round and nine-month schools. Further, more than three quarters of available studies were student theses, dissertations, and reports rather than peer-reviewed journal articles. Cooper and his co-authors wrote:

“Perhaps the clearest conclusion is that a truly credible study of modified calendar effects has yet to be conducted. It would be difficult to argue with policymakers who choose to ignore the existent database because they feel that the research designs have been simply too flawed to be trusted.”

A 2019 meta-analysis, which focused on single-track year-round calendars, found similar limitations. Co-authors Dan Fitzpatrick and Jason Burns reported that “few studies used advanced analyses or quasi-experimental designs.” Out of 35 studies, 26 were unpublished doctoral dissertations, three were district reports, two were conference presentations, and

one was a master's thesis. Only three studies were journal articles, and, of those, one article analyzed data from a single school and another, which apparently used data from just three schools, appeared in a journal that does not currently have a working website and whose editor did not respond to our queries about how to find the article or whether the journal was peer reviewed.

Averaging results across studies, both meta-analyses reported that students at year-round schools scored a little higher than students at schools on traditional calendars. But as Cooper and his colleagues pointed out, it is hard to know how seriously to take such an average. Averaging results across studies of poor, mixed, or unknown quality cannot produce a credible estimate of a policy's effect.

Diamonds in the Rough. In this largely unimpressive literature, though, there are a handful of peer-reviewed studies that stand out for their rigor and size. Those more rigorous studies of year-round calendars found no benefit for student learning—and some evidence of harm.

The earliest credible study we know is a 2001 *American Journal of Education* article in which Brad McMillen compared 67 year-round and 1,364 nine-month elementary and middle schools in North Carolina. In what would today be described as a value-added analysis, McMillen estimated the effect of year-round calendars on student reading and math scores, adjusting for gender, ethnicity, parents' education, and scores a year earlier. He found the year-round calendar had no effect.

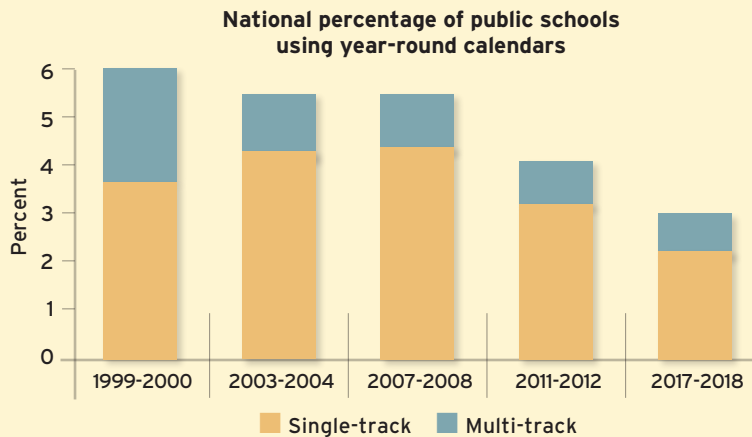
McMillen then examined 39 “schools-within-a-school,” where some children followed a year-round calendar while others followed a traditional nine-month calendar. This analysis, which also controlled for student characteristics and prior scores, also found no effect—an especially convincing result because it held the school constant while varying only the calendar.

In the 2010s, a few economists started asking what happens when a school switches calendar types. Studies of calendar switching answer exactly the question that school leaders should ask: If I switch a school to a year-round calendar, will children learn more? These studies isolate the effect of school calendars by holding the school and students constant. For example, one year a child attended 3rd grade on a traditional calendar, and the next year the child returned to attend 4th grade at the same school, but the school had switched to a year-round calendar.

Steven McMullen and Kathryn Rouse have published several articles on calendar switching in Wake County, North Carolina, where 22 schools switched to multi-track 45/15 calendars

Fewer Schools Are Following Year-Round Calendars (Figure 2)

The share of U.S. public schools following year-round school calendars fell by half between 1999-2000 and 2017-18, to 3 percent of all schools from 6 percent.



NOTE: Data are from 1999-2000 through 2011-12, and 2017-18.

SOURCE: Authors' calculations, based on National Center for Education Statistics data from the School and Staffing Survey (1999-2012) and National Teacher and Principal Survey (2017-18).

in 2007. They found that year-round calendars had essentially no impact on average test scores.

Similarly, Jennifer Graves (one of the authors of this article) examined the impacts of calendar switching in California, where 934 schools switched between nine-month and various types of balanced calendars 1,208 times between 1998 and 2005. Graves found that test scores declined by 1 to 2 percentile points when schools switched to year-round calendars. Test scores declined on multi-track calendars, which were adopted in a desperate effort to reduce crowding, but test scores also declined on single-track balanced calendars, even though those were adopted for purely academic reasons.

It is often claimed that year-round calendars are better for disadvantaged students, but rigorous studies have found no

that popular ideas about summer learning are not consistently supported by recent research (see “Is Summer Learning Loss Real?” *feature*, Winter 2019). Some recent studies find that children lose very little skill over the summer; other studies find that summer learning losses are no larger among disadvantaged students than among advantaged students.

The second problem is that this argument focuses exclusively on the summer months, while ignoring what happens during the rest of the year. Remember that balanced year-round calendars have no more than the usual 175 or 180 school days, so while they do include more school days during the summer, they also have fewer school days and more vacation days during the fall, winter, and spring.

That being the case, one might expect that children on year-

Most public conversation about balanced calendars assumes that they are designed to help students learn. In fact, over the past 50 years, districts have adopted balanced calendars to address overcrowding and save money.

benefit for Black students, Hispanic students, or students who qualify for free or reduced-price lunch. The Wake County calendar-switching study did find benefits for year-round students in the most crowded schools, but the California study did not.

The California and North Carolina studies are not the last word on the subject, and similar studies should be conducted in other districts that have switched on or off year-round calendars in recent years—such as Chicago, Indianapolis, Oklahoma City, and Clark County, Nevada. But we now have rigorous evidence from more than 1,000 calendar changes over the past 25 years—and none of it suggests that year-round calendars do anything to raise achievement.

Myth #6: Year-round calendars increase summer learning.

The disappointing effects of year-round calendars may seem hard to accept, because there are a couple of commonsense arguments suggesting that year-round calendars really should have academic benefits. But these arguments don't hold up very well when inspected closely.

One argument rests on popular ideas about summer learning. Because year-round calendars shorten summer vacation, the argument goes, they must reduce summer learning loss, which is most acute among disadvantaged students. Therefore, year-round calendars really *should* boost test scores, especially for the disadvantaged.

There are two weak points in this argument. The first is

round calendars learn more during the summer, but less during the rest of the year. And that's exactly what we've found.

In a 2015 book chapter, Paul von Hippel (one of the authors of this article) compared student learning in reading and math at 30 schools that used year-round calendars and 116 schools in the same counties that used traditional calendars, focusing on students in kindergarten and 1st grade. Students at both types of schools started kindergarten with similar skills. Students at schools with year-round calendars did learn more during the summer months of June, July, and August, but students at schools with traditional nine-month calendars learned more from September through May (see Figure 3). Over a period of 12 months, the amount that students learned was almost exactly the same.

Intuitively, that makes some sense. Year-round calendars don't increase learning because they don't increase the time that children spend in school.

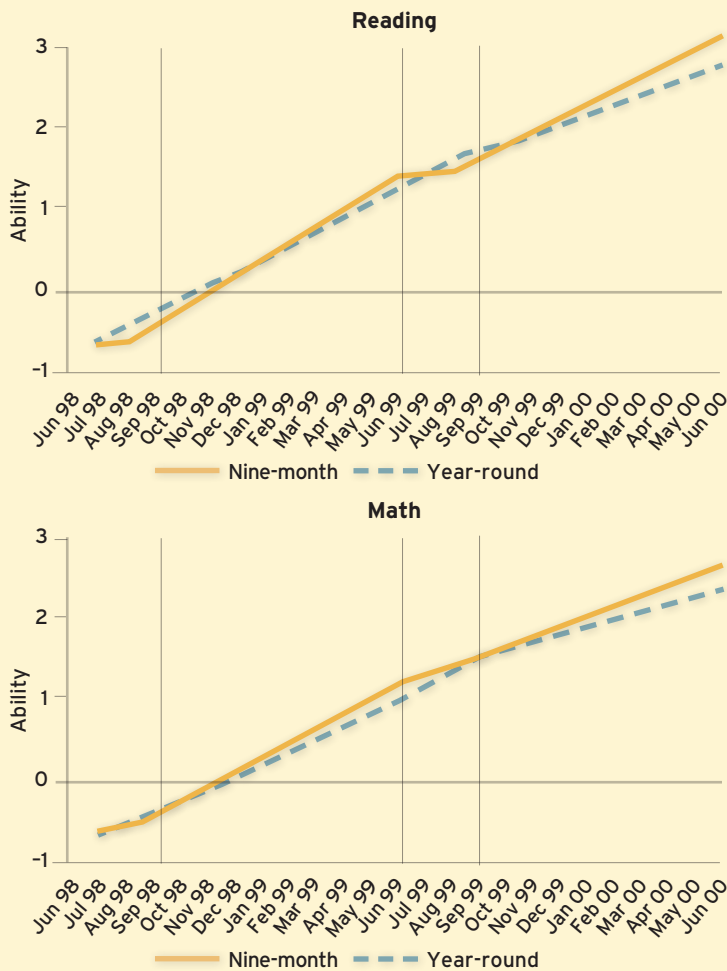
Myth #7: Year-round calendars help schools supplement instruction.

Another argument for balanced calendars is that they provide more opportunities for supplementary instruction during the “intersessions,” or mini-vacations that occur more frequently throughout the year. Intersession instruction can help catch up students who are behind or offer enrichment to students who are on track or ahead. Or so the argument goes.

However, multi-track calendars that keep classrooms filled

Summer Boost at Year-Round Schools Fades During the School Year (Figure 3)

From the start of kindergarten through the end of first grade, students attending year-round schools learn more during the summer compared to their peers at schools following traditional nine-month calendars. But those differences shrink over the next nine months, when students at schools with traditional calendars spent more time in class and learn more.



NOTE: Item Response Theory ability scales from the Early Childhood Longitudinal Study, Kindergarten cohort of 1998-99, National Center on Education Statistics. Scores have been standardized to have a mean of 0 and variance on 1 on the first test date in the fall of kindergarten.

SOURCE: Von Hippel, P. (2015) "Year-Round School Calendars: Effects on Summer Learning, Achievement, Parents, Teachers, and Property Values." Ch. 13 in *The Summer Slide*. New York: Teachers College Press.

can't easily support intersession instruction, because when students from one track are on break, students from the other tracks are in school, leaving little space free for supplemental instruction. Single-track calendars offer more chances for supplemental instruction because the school is empty during intersessions. But that is not unique to year-round calendars—schools on traditional nine-month calendars have offered summer-school and after-school instruction since year-round calendars were a gleam in reformers' eyes.

The question, then, is whether it's better to offer supplemental instruction during a long summer break or during the shorter, more frequent intersessions of a year-round calendar? We have found no research exploring this question. While there are some well-designed studies of summer learning programs, we are not aware of any research specifically examining how intersession instruction affects student learning. Further, we have not found data on how many year-round schools offer intersession instruction or how many students participate.

The literature on summer school gives some reason for concern. Although summer programs can help children who attend, getting students to attend regularly can be a serious challenge. Summer programs can be difficult for school districts to staff and to fund. Collective-bargaining agreements don't require that teachers participate, and districts' operating budgets and most state and federal aid programs are typically designed to cover 175 or 180 days of instruction. In our experience, much of the literature on summer learning programs is about programs that no longer exist or about how effective summer programs would be if only more students showed up for them.

Do intersession programs have the same challenges? Anecdotally, they do. For example, when some Indianapolis schools adopted a single-track year-round calendar in 2010, the district announced that students who were below grade level would be required to attend 20 days of school during intersessions. But the district never funded more than 10 days of intersession instruction, and eventually, individual schools were allowed to decide whether to offer intersession instruction at all. Similarly, in 2019, public schools in Flint, Michigan, adopted a balanced calendar that included funding for four weeks of intersession instruction. Three years

later, the superintendent lamented that not enough struggling students were attending the intersessions. He voiced his support for returning to a traditional nine-month calendar with eight weeks of summer school, commenting that “there’s no reason to continue doing something that’s not working.”

Myth #8: Year-round calendars are popular.

Proponents claim that families and kids like year-round calendars (once they realize they still get vacations). And in the latest push, year-round calendars are presented as an intervention that teachers will like because intersessions will help them recover from pandemic burnout.

But the evidence for these positive attitudes is shaky. In their 2003 meta-analysis, Cooper and his colleagues described opinion polling carried out in more than 50 year-round districts, reporting that “in general, survey respondents felt more positive than negative about modified school calendars.” But the data only showed that respondents favored the high end of the rating scale. For example, when asked to rate the year-round calendar on a

switched to multi-track year-round calendars relative to comparable homes near schools that stayed on a traditional calendar. The result suggests that families were willing to pay a premium to avoid sending their children to a year-round school.

Follow Research, not Myths

After unprecedented disruptions in schooling worldwide, year-round calendars once again are being promoted as a fresh approach to stem pandemic learning loss and teacher burnout. And years ago, it was reasonable to think that redistributing instructional time to get rid of the long summer break might help teachers and students regain their footing. In 1971, or 1996, or even 2003, one could say that the evidence on year-round calendars was inadequate and inconclusive, and that school leaders should feel free to do whatever they felt was best.

But today we know better. There is little reason to hope that adopting balanced calendars will help schools in South Carolina, Washington, or anywhere else recover from pandemic learning loss. And as for addressing teacher burnout, consider

Until the pandemic, the prevalence of year-round calendars had been declining for 20 years.

scale from 1 to 5, the average response in year-round districts was 3.6. That result is uninterpretable without a comparison group asked to rate their experience on traditional calendars.

Do parents and teachers prefer year-round or traditional calendars? That’s a hard question to answer in a survey. But actions speak louder than words. Half of year-round schools nationwide—and nearly three quarters of year-round schools in California—reverted to traditional calendars between 2000 and 2018, a switch that’s hard to explain if the calendars were widely beloved. In Chicago, where some schools used single-track calendars through 2012–13, CBS Chicago reported that “many parents complained that having the two different calendars made it difficult to plan work schedules, daycare, and vacations, if they had some kids in ‘traditional’ schools and others in ‘year-round’ schools.” Perhaps that’s one reason why the Chicago Teachers Union demanded an end to the year-round calendar as one condition for ending its 2012 strike.

Research confirms some of the challenges that year-round calendars pose for parents and teachers. Jennifer Graves has found that, in counties where many schools adopted year-round calendars, mothers were less likely to enter the workforce when their children reached school age. In addition, schools struggled to attract and retain experienced teachers, who were often working mothers themselves, after adopting year-round calendars.

Year-round calendars can even depress local property values. Brooks Depro and Kathryn Rouse found that property values declined near schools in Wake County, North Carolina, that

the demographics of the U.S. teaching force: about half of teachers have school-age children living at home, and three quarters are women. Calendars that families anecdotally describe as being stressful, and that research indicates push women out of the workforce, seem an especially ill-considered approach.

Those who ignore history are condemned to repeat it, but school leaders who know history and research are not. They can rise much more effectively to the challenges posed by the Covid-19 pandemic. Instead of adopting disruptive, distracting, and ineffective school calendars, school leaders can leave calendars alone and focus on interventions that research suggests can work: improving curriculum, bolstering instruction, making effective use of technology, and offering targeted supports, like high-dosage tutoring for the children furthest behind.

Year-round calendars, by contrast, do little to raise achievement and pose a host of logistical problems that are hard for schools and parents to solve.

Why take them on if we don’t have to?

Paul T. von Hippel is professor and associate dean for research in the LBJ School of Public Affairs at the University of Texas at Austin. He is a longtime researcher on summer learning who last summarized the evidence on year-round calendars in a 2015 book chapter. Jennifer Graves is associate professor of economics at Universidad Autónoma de Madrid. She has published eight studies about the effects of year-round calendars.