

Promising progress, fragile foundations: A five-year analysis of school innovation, 2019-2024

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The Canopy is a collaborative project involving hundreds of organizations, stewarded by the Center on Reinventing Public Education and Transcend.





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Executive Summary

Since 2019, the world has irrevocably changed, and public education is not exempt. The pandemic and related political, social, economic, and technological developments have indelibly changed the K-12 landscape. Parents, teachers, and national leaders have urged schools to seize this moment of opportunity to design more engaging, flexible, and empowering learning experiences that help every young person thrive.

But the changes most schools have made—such as increasing use of education technology, differentiating instruction, and bolstering counseling services—are closer to incremental adjustments than true shifts toward a new grammar of schooling. Meanwhile, the shortcomings of conventional school designs have only become more clear as achievement lags, adolescent mental health suffers, chronic absenteeism remains stubbornly high, and longstanding inequities widen.

However, glimmers of a more seismic shift may exist in schools that have brought to life unconventional designs to address inequities, empower students, and personalize learning. Many of these schools began this work long before the pandemic hit.

This report is a glimpse into those schools. The Canopy project, a national, annual effort to surface and share information about innovative school designs, first launched in spring 2019.

Canopy first seeks school nominations from hundreds of organizations with expertise in school innovation and then distributes a survey to school leaders that asks about the schools' designs. The project has one year of baseline data from the 2018–19 school year before the pandemic struck, and from the 2020–21 through the 2023–24 school years. The analysis in this report uses longitudinal survey data, along with qualitative interview data, to find answers to these questions:

- Where are Canopy schools innovating, and to what end?
- 2 How have Canopy schools changed their designs since 2019, including during the pandemic?
- What do Canopy school leaders think the future holds for their schools?

Our findings show that unconventional learning environments in Canopy demonstrate promising results for students and families in a wide range of contexts. But these schools also face sustainability threats that underscore how school-level innovation can be fragile without systemic enabling conditions. To improve student experiences and outcomes on a large scale and in schools beyond the Canopy project, policymakers, funders, and researchers must play critical roles in strengthening the conditions for innovation in schools.

Key Findings

Part 1: Canopy schools are solving problems that matter

- Canopy schools' solutions offer bold answers to both urgent post-pandemic problems and long-standing issues in education. School leaders are solving specific challenges in their communities with a desire to push the boundaries of what's possible in K-12 education, address inequities, and empower students. Many schools' approaches are grounded in evidence about what works, as well as what students and families want and need. Some schools' innovative approaches are helping accelerate learning, reduce chronic absenteeism, improve mental health, and prepare students for success in adulthood.
- Canopy schools show that innovation doesn't arise only in a limited set of circumstances or as a luxury for privileged students. These schools are vibrantly diverse in their contexts and designs, operating in different kinds of communities and governance models (traditional public, public charter, and private).

Dive in: Read examples of schools achieving results

Part 2: Canopy schools' designs balance consistency and evolution over time

• Canopy schools' designs have been remarkably consistent from year to year. Based on survey responses, schools have continued to implement the vast majority of the school-wide practices they already had in place to create more engaging, flexible, and empowering learning environments. Some leaders said the pandemic only increased their conviction in the value of their schools' unconventional designs.

- adopted new practices that support student well-being and equity, deeper learning, and postsecondary pathways—though at different rates over time. At the height of the pandemic, schools especially prioritized new practices to support student well-being and equity. Since most students returned to in-person classes, schools have increasingly focused on instructional approaches that engage students in complex problem-solving and hands-on experiences. And since 2019, schools have steadily and consistently expanded their work on postsecondary pathways.
- The use of blended learning surged during the pandemic but may now be receding—or changing. Reported use of blended learning, or the integration of online learning into brick-and-mortar schools, spiked in the 2021 survey but has been receding since. Interviews suggested that blended learning practices may actually be evolving and may also be underreported on Canopy surveys. Given that blended learning can enable greater personalization at scale, further research should investigate if and how schools are changing their blended learning practices.
- Canopy schools are eager to leverage artificial intelligence (AI), but only a few are advanced early adopters. Schools hope AI can help personalize learning and ease teachers' loads. Most schools that reported using AI appear to be doing so only in limited ways, though a few demonstrate ambitious use cases.

Dive in: Read how school designs are evolving



Part 3: Canopy schools anticipate growth and challenges ahead

 Leaders want to partner more deeply with students and families. The most frequently selected practices that school leaders want to pilot are co-leadership approaches that involve students and families in decision-making.

- Some leaders have their sights set on expansion. Some Canopy schools are enrolling more students, building or expanding into new spaces, opening new schools, or codifying their "model" to share with other schools.
- Sustainability is a big concern for many.

 The majority of leaders, and especially charter school leaders and leaders of color, are concerned about adequate financial resources to sustain their schools' innovative approaches in the coming years.
- Finding teachers with the right training is elusive. Leaders are worried about how teacher workforce issues will affect their own schools and the broader education sector. Canopy school leaders are also uniquely concerned about finding teachers with the right training and background to teach in uncommon instructional models and school cultures.
- Canopy schools' biggest policy hurdles are accountability, graduation requirements, teacher credentialing, and scheduling.
 Survey responses alone don't reveal if these policy barriers are threats to Canopy schools' own operations and success, but it's clear that many existing policies will stand in the way of spreading innovative school designs.
- Lack of tools, capacity, and time prevent broader adoption of new assessments.
 To assess and produce evidence of the outcomes they prioritize, school leaders want capacity-building opportunities and better access to new assessment tools.
 But evidence suggests that the market for innovative assessment tools—the kind of support schools say they most need—is still emerging.

Dive in: Read what schools think the future holds

Part 4: Conclusion and recommendations

Our findings in this report underscore that innovation at the school level—not just in education technology, policy, or central office operations—is a key lever for shifting students' experiences to be more engaging, flexible, and empowering. In the pandemic's wake, such a shift is essential in K-12 education, and Canopy schools help illustrate what new designs look like in a wide range of communities and contexts.

However, innovative schools' foundations may be fragile because their emergence and sustainability depends on factors often outside of their control: funding availability, innovation-friendly policies, workforce pipelines, and advances in assessment. Launching new or redesigned schools is necessary, but not sufficient, for durable and systemic change.

Connecting our Canopy project findings to lessons learned from decades of school reform efforts, we argue that it's time for a historic investment in strengthening the conditions for innovation in schools. Policymakers, funders, and researchers should:

- 1 Invest in new designs: Provide start-up funding, craft policies that support innovation, power innovative teacher pipelines, and document emerging practices—especially in leveraging technology and engaging families in decision-making.
- 2 Investigate impact: Recognize unconventional outcomes when evaluating the success of innovative school designs, develop new assessments to generate a broad spectrum of evidence for those outcomes, and bridge silos between data systems across districts and state agencies.
- **Spread effective approaches:** Support sustainable revenue strategies, offer adoptable models as starting points, and align central office strategies with innovation goals.



Dive in: Read the recommendations

The Canopy project shows that reimagining learning environments in school-wide, enduring ways is possible anywhere in the country, in any kind of school. Indeed, it is underway—and students are benefiting. But to sustain and spread this progress, policymakers, funders, and researchers must prioritize addressing what appear to be worryingly fragile conditions for school innovation.

METHODOLOGY NOTE: ABOUT THE CANOPY PROJECT AND THIS REPORT

The Canopy project is a collaborative effort to build collective knowledge about school-level innovation. The project aims to surface and share knowledge about where, how, and why K-12 schools are "innovating," with a focus especially on student-centered, equitable approaches that deviate from conventional assumptions about what school must be. It does this using a three-step process:

Step 1: We <u>invite</u> a diverse set of education organizations across the country to nominate learning environments that are innovating at a school-wide level toward greater equity and student-centered learning. We define "learning environment" as schools and alternatives to traditional schooling that provide core, not just supplemental, educational experiences.

Step 2: We ask leaders from the nominated schools to complete a <u>school design</u> <u>survey</u> where they share information about how and why they're reimagining the school experience. Every survey asks school leaders to report what their schools are implementing consistently at a school-wide level (not just sporadically, or in some classrooms but not in others). Leaders do this by selecting from a set list of "practices."

Step 3: We publish data online at www.CanopySchools.org in an interactive portal.

This report uses data from all five Canopy school surveys so far (see table). Our analysis focuses on repeat responders, or the 263 schools with at least two years of survey participation. This way, we can actually observe changes to responses within individual schools, not just changes in our sample of participating schools each year. This report also includes analysis from interviews with a subset of Canopy school leaders in the spring and summer of 2024.

Spring 2019	173 schools responded	
Spring 2020	No survey	
Spring 2021	232 schools responded	263 schools completed at least two of the five
Spring 2022	161 schools responded	Canopy surveys
Spring 2023	251 schools responded	
Spring 2024	189 schools responded	

To learn more about the details of our methodology, see the <u>Appendix</u> as well as the other Methodology notes in this report.

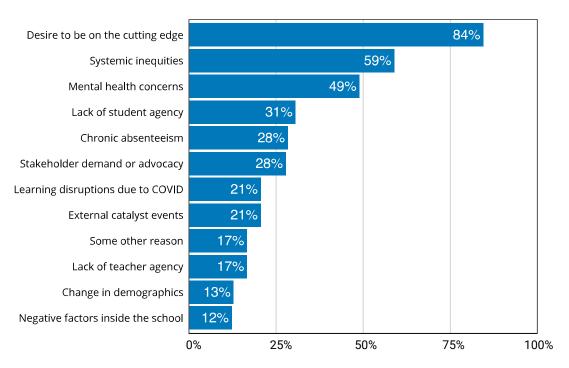
Part 1. Canopy schools are solving problems that matter

Canopy schools are developing bold solutions to urgent challenges

Four out of five Canopy school leaders indicated in surveys that they're innovating in order to show what's possible and to be on the cutting edge of redesigning K-12 schools. But this isn't just "innovation for innovation's sake"; schools are working to solve real problems that matter in their communities. Nearly six in ten schools reported innovating to address systemic inequities, and just under half were motivated to address mental health concerns.

Figure 1: Factors Leading to Innovation in Canopy Schools

School leaders could select as many responses as applicable to their schools. Sample limited to schools that participated in the 2024 Canopy survey (N = 189).



Percentage of Canopy schools in 2024

This underscores what we argued in a <u>previous report</u>: Innovation is about more than what's "new" or "different." Its purpose is to bring about a more equitable system that focuses on the strengths, needs, and potential of every student. While many schools are still working to measure the student outcomes they care about most (<u>see Part 3</u>), some are clearly having an impact. The following sections describe urgent issues impacting K-12 schools today, and how Canopy schools are making progress to solve them.

The problem



What the research says



The pandemic created learning disruptions from which most states <u>haven't recovered</u>, amounting to a <u>reversal</u> of nearly two decades of progress toward raising math and literacy achievement. Recovery has been slowest for <u>students with unique learning needs</u>, including students with disabilities and students classified as English learners.

High-impact tutoring, learning acceleration strategies, and high-quality curricular materials can boost outcomes, and inclusion of special populations in general education programs can reduce disparities under the right circumstances. Additionally, schools can create the conditions for academic achievement for all by promoting a supportive learning environment with high expectations.

Where Canopy schools are making progress



At Girls Athletic Leadership Middle School (GALS), a public charter middle school in Denver, Colorado, former executive director Carol Bowar said that the school has recently seen growth in the number of students with Individualized Education Plans (IEPs) and 504 plans. Although the school wasn't originally founded to focus on special education, belonging and inclusion are two of its core values. "We attract folks who are looking for a place where their kid's going to be well known," said Bowar, which also means having individualized support to succeed. All of the courses students take at GALS are designed to be maximally inclusive of students with a wide range of disabilities. "We do . . . almost exclusively 'push in' versus 'pull out,' . . . and [make] sure that we're well staffed in that area. And we've seen the investment give back tenfold." According to the school, students with IEPs are meeting their academic learning and life skills goals at the same rate as the general student population. But the success didn't happen overnight: the school spent several years developing protocols for how the general education program and special education program would interconnect and training staff to implement a fully inclusive educational model. As Bowar said, "You can't just have the idea about an inclusive environment, and poof, it happens."

At Future Public School, a public K-6 charter school in Boise, Idaho, educators use blended learning to enhance both student agency and literacy practices. Students use platforms like Lexia for literacy and Reflex for math, combining teacher-led instruction with digital learning tools. In the fifth and sixth grades, a new advisory block gives students the opportunity to track their own progress and manage their learning schedules, encouraging accountability. "They have an accountability sheet, and they're monitoring their own minutes and learning gaps and strengths based on those two specific programs," explains Amanda Cox, the school's executive director and co-founder. The recent shift in learning platforms has helped the school better engage both students and families. Future Public School has seen improved results, with a clear connection between the amount of time students spend on the programs and academic growth. Cox emphasizes that this shift is meant to promote agency for older students, who are ready for more accountability and responsibility with the right support. "In our larger school

model [we believe] that empowering students with as much information as possible gives them more ownership of their learning and helps them."

Leaders of Excellence, Advocacy and Discovery (LEAD), formerly known as Concourse Village Elementary School, is a public district school in the Bronx that has been lauded for boosting academic achievement after a successful turnaround led by principal Alexa Sorden in 2013. Since the pandemic, the school has shown strong results. The state test scores from SY2022-23 show the school outperforming the district and the state on English Language Arts and Math, with most students demonstrating proficiency. Behind the test scores are real stories of impact on students and families. One parent shared with the school, "A few years ago, I never thought I would see [my child] get upset that reading time was over! [This] was the school he needed to ignite his love of reading, teach him the internet is for more than playing games, and empower him to find his answers." The parent went on to say that this child will be going to middle school in an academically "intense" environment where

he's likely to thrive—something that, a few years before, was hard to imagine. LEAD's success equation includes a culture of high expectations, frequent formative assessments to help teachers pinpoint which students need more help, and an emphasis on increasing students' self-direction and social-emotional skills.

Common Ground High School, a charter school focused on environmental education in New Haven, Connecticut, can point to wide-ranging evidence of student success and achievement: the school outperforms the state average in the percentage of students who are on track to graduate, and recent NWEA MAP tests show double-digit gains in the percentages of students demonstrating proficiency in math and language. Located on 20 acres of city park land, the school emphasizes student leadership, environmental and experiential learning, and "expanded learning opportunities" where students get high school and college credit through paid jobs, internships, and early college courses.



The problem



What the research says



Chronic absenteeism rates have <u>nearly doubled</u> since the pandemic, with nearly two-thirds of enrolled students attending a school with high or extreme levels of chronic absence.

Schools must <u>cultivate positive conditions</u> <u>for learning</u> through healthy and welcoming environments with relevant and engaging learning experiences.

Where Canopy schools are making progress



CityLab Innovation High School, a public school in Revere, Massachusetts, is pioneering a counterintuitive approach to decreasing chronic absenteeism: rather than sequester underperforming students in dead-end remedial programs on school grounds, CityLab has increased attendance rates through a school design that sends students off-campus for real-world learning experiences. Not long ago, CityLab went by a different name and had a reputation for being the school students were sent to "if you don't make it at the traditional high school," according to principal Stacey Mulligan. In her first year as principal in 2021, Mulligan was shocked by the low attendance rate. "Attendance was around 30%. . . . Some days probably in the 20% [range], if [students] came at all." With support from the state education department and the nonprofit organization Digital Ready, Mulligan redesigned the school around experiential learning, dual enrollment at a local college, and paid internships. While students spend most of their time off campus, CityLab teachers provide wraparound support, from checking in with students every day and communicating with professors and families to helping students navigate public transit. The improvements in student engagement have been dramatic. "It was such an amazing thing to watch attendance go from 30 percent to 87-92 percent," she said. "When we made the change, I'm like, 'Is anybody even gonna apply?' You know, we're still carrying

that reputation of the old school. . . . Now, my phone's ringing off the hook, [with parents asking] "How do I get in?""

Liberty Academy is an alternative public high school located in the Liberty Public School district in a suburb of Kansas City, Missouri. It serves over 100 students with a history of trauma, mental illness, and substance abuse. While students at Liberty Academy are typically thought to run the highest risk of not graduating, Lead Designer Art Smith says their attendance rates are on average only slightly lower than the traditional high schools in the district and, in fact, most individual students have much higher attendance rates at Liberty Academy than in their previous schools. "We run 80-85% attendance most days. So, we have pretty good attendance but . . . [chronic absenteeism] is just the symptom of a larger problem." The larger problem, according to Smith, is that most high schools are not designed to honor or develop student agency. In contrast, Liberty Academy was "built from the outside in with the aim of putting students at the center." Creating such a model has meant jettisoning many traditional structures and systems. "None of our teachers have classrooms. None of them teach subjects anymore. We don't have an eight period day. We don't have a schedule. . . . We have a map for each day that we all follow, and then kids build and manage their own day. We purposely don't have a lot of structure so that we can be almost

anything a kid needs at any time." To measure success, Liberty Academy collects a range of data metrics personalized to each student, from hours spent offsite engaging in internships to skill-based credentials, which they track using a Mastery Transcript Consortium digital learning portfolio. While students are given freedom to choose what and how they learn, they also have to define and defend their growth targets. "Students are not in this model without understanding that they are in charge of their own success or failure. It's a massive personal responsibility," Smith said.

Nowell Academy, a charter high school in Providence, Rhode Island, has made remarkable strides in raising attendance rates among overage and under-credited students, including pregnant and parenting students. Since its founding, the school has increased attendance from rates in the teens to approximately 68%, a significant achievement given that nearly all students previously struggled with chronic absenteeism. To support consistent attendance, Nowell has developed a robust support system, including on-site daycare for parenting students, a 1:1 mentorship model, and engaging curriculum experiences that tie academics to real-world applications. Additionally, the school provides attendance incentives, like gas cards and gift cards, and daily check-ins with students to remove barriers to attendance. Leaders at Nowell believe the key to success is an inclusive community where students feel both supported and motivated to invest time in their education.



The problem



What the research says



Four in ten American adolescents experience persistent feelings of sadness and hopelessness, with disproportionately high rates of depression among girls and LGBTQ+ youth. Nearly 20% of children and youth have a diagnosed mental, emotional, developmental, or behavioral disorder, with emergency room visits and suicide rates on the rise.

Schools can support the development of students' <u>social and emotional skills</u>, including self-regulation and coping skills. They can also offer prevention screenings and <u>mental</u> <u>health intervention services</u>, and use <u>restorative</u> practices to create safer school environments.

Where Canopy schools are making progress



Ember Charter School is a K-12 public charter school in Brooklyn, New York, founded on the belief that school should help students craft their own personal narratives and identities as they prepare for a thriving adulthood—goals that necessitate sound mental health. The school's founder and managing partner Rafig Kalam Id-Din II explained that "mental health is all about our ability to navigate the world in a way that's consistent with our expectations and, when those expectations are not being met, to be able to adapt, to navigate through conflict in a way that doesn't lead to increased violence and harm." The school has designed and implemented a set of rubrics that help students' design and tinker with the "architecture of identity," as they strengthen their capacities to regulate their own emotions, form strong social bonds, and navigate complex situations. According to Kalam Id-Din, these skills set the foundation for deeper learning: "One's ability to regulate their emotions means that you can give yourself time to learn other skills that require more depth and concentrated focus." Kalam Id-Din points to a first-year student whose use of mindfulness practices led to a dramatic improvement in his peer relations: "When he came to us, he was in conflict every day. Now, fast forward to the end of the year—he hasn't

had one of these exchanges in months. And so that doesn't mean that he didn't have conflict. Instead, he would walk away and would say [to a faculty member], 'Listen, I need some time away, because I was about to say something to this person.' This is not the vocabulary he had before. It's not an analysis he would have brought to bear before."

Bennett Day School, an independent K-12 school serving over 300 students in Chicago, Illinois, has put the development of strong relationships at the center of its mission. As the founding upper school director Martin Moran explained, "Everything has to start with trust: Teachers need to trust kids. Administrators need to trust teachers. Parents need to trust administrators." As a teacher, Moran observed how many systems and structures in school actively and unnecessarily undermined trust while harming high school students' mental health and causing unnecessary conflict with parents. He calls out grading as a particularly problematic practice: "When I was working in schools with grades, more so than anything, they were the most common point of friction between kids and teachers, schools and families. Grades created these moments of conflict that seem artificial." Moran noted that low grades would rarely motivate students to improve and

usually had the opposite effect. "You'd see the telltale signs of someone who's feeling terrible about themselves and [would] just stop coming to school. . . . It was just a coping strategy, where they'd think, 'The easiest way for me to not have to deal with my grades is to not be there when they come out." To address these issues, the school adopted a competency-based assessment system that frames achievement around personal growth and skill development and instituted a daily advisory period in which students can check in with their designated mentor teachers. The school has also minimized the use of highstakes tests in favor of holding "demonstrations of learning" at the end of each trimester. These approaches are showing results for students' well-being and sense of connectedness. In the Challenge Success survey on student mental health and well-being, 95% of students at the school reported having at least one adult in the building they feel comfortable approaching with a personal problem. The national average, by comparison, is only 70%. To gauge the health of the community, Moran also tracks more indirect measures, like how many students are staying after school for extracurricular activities or how many are attending prom. "We want to see that our kids feel connected [and] feel like they're seen," he said.

Da Vinci RISE High School is a public charter in Los Angeles designed as a flexible, responsive learning environment for students navigating foster care, housing instability, probation, and disruptions to their academic journeys. Given this focus, adults in the school have significant experience and training with trauma-informed approaches that help them create emotionally and physically safe learning environments for students with long-term, often repeated trauma. RISE school leaders shared that in the school's student experience survey, 95% of students reported feeling safe in their learning environments, and nearly no one reported acts of physical or social bullying based on race, gender issues, or other differences. The student survey also showed that students have developed positive beliefs about their own academic skill sets: 94% of students agreed that they can increase their intelligence by challenging themselves, and 82% said they believe they come to class prepared. Such beliefs are critical, leaders said, "to growing the type of selfconfidence and self-perception that is necessary for success in high school and beyond."



The problem



What the research says



The value of a high school diploma alone is decreasing as a growing number of jobs require specialized training or higher education. Meanwhile, college debt is at an <u>all-time high</u>, and Americans are <u>increasingly questioning</u> whether higher education is worth it.

Schools should help students choose from a variety of possible pathways to success in adult life by expanding college access, such as through early college programs, offering career exploration and work-based learning, counseling all students on their options, and deliberately building students' social capital.

Where Canopy schools are making progress



San Diego Met High School is a public high school in San Diego Unified School District that's part of the Big Picture Learning network. Like all schools using **Big Picture's approach**, San Diego Met has its students complete credit-bearing internships with local mentors during every semester of high school. The school is co-located with San Diego Mesa College, meaning that high school students can earn college credits in real college classrooms without paying any tuition. A research report investigating alumni from the school found that 82% of San Diego Met graduates enrolled in college after graduating high school, with a 91% freshman-to-sophomore persistence rate. Equally important, the report found that in a survey of alumni from San Diego Met and two other Big Picture Learning schools, nearly three-quarters of survey respondents who were working and not in college said they had secured their job through a contact they met during a high school internship.

Build UP Community School, a private, 6-year high school and junior college-level vocational training program in Birmingham, Alabama, recently achieved a milestone: its first new homeowner. The school enrolls lowincome students who qualify for scholarships under the Alabama Accountability Act, and students' educational experience combines core academics, paid apprenticeships in the construction and real estate industries, and vocational training. By graduation, Build UP aims for students to walk away with a high school diploma, an associate's degree, and three highdemand trade certifications, which usually mean higher starting pay. On top of that, the school aids students in becoming homeowners in their own communities by purchasing the houses they helped flip while in school. Recently, the school <u>congratulated</u> its first homeowner, 21-year-old Torrey Washington.

The **Blue Valley Center for Advanced Professional Studies**, or CAPS, was founded in 2009 in Blue Valley School District just outside of Kansas City and has spread its <u>CAPS model</u> to schools in over 180 districts since then. Students at Blue Valley CAPS spend half their day in the CAPS experience, and half at their home high school. While at CAPS, students work directly with industry, academic, and community partners on real-world projects that expose them to the reality of a particular industry. An <u>alumni survey</u> with over 1,000 responses from across the CAPS Network showed that nearly two-thirds of recent CAPS alumni are enrolled in a degree- or certificate-granting program, and two-thirds are also employed full-time, with about half of full-time employees earning salaries of \$60,000 or more. The alumni survey also suggested that the CAPS experience may be especially successful at building students' self-efficacy: "ability to respond positively to mistakes" and "confidence in myself" were two of the skills that alumni ranked as the most important ones they learned at CAPS.



Canopy schools are vibrantly diverse by geography, type, and student population

There are Canopy schools in many geographies and in diverse communities of varying socioeconomic circumstances. The 263 schools that we included in this report's longitudinal analysis were mixed across sectors, and about half are traditional district schools. They are mostly urban, though one in five reported serving rural communities.

Figure 2: Canopy Schools by Geographic Region

Sample limited to schools that participated 2 or more times in a Canopy survey (N = 263).

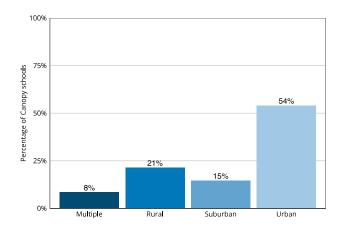
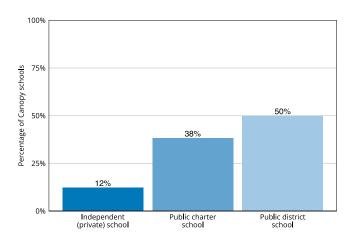


Figure 3: Canopy Schools by Type

Sample limited to schools that participated 2 or more times in a Canopy survey (N = 263).

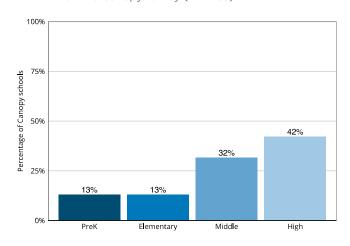


Over four in ten were high schools, and only 13% of schools offered elementary grades, which is notable as the majority of the nation's schools are elementary level. Amidst strong interest in high school redesign, Canopy appears to be capturing many of the efforts underway to remake secondary education. We found that, since 2019, the grade levels that Canopy schools offer have remained mostly stable, with some exceptions (such as when a newly launched school has added one new grade level per year).

Canopy schools' student populations vary widely. Among the schools we included in this report's longitudinal analysis, there's wide variation in their proportions of economically disadvantaged students and students of color, with the average just over 50%. The average proportions of

Figure 4: Canopy Schools by Level

Sample limited to schools that participated 2 or more times in a Canopy survey (N = 263).



students considered English learners and students with disabilities were lower, but a handful of outlier schools have far larger populations of these learners. Over time, schools' student demographics have changed slightly, with a small rise in the proportions of students with disabilities (as in the general school-age population across the nation) and students considered English learners. The proportions of economically disadvantaged students and students of color have fluctuated slightly but remained comparatively stable.

Percentage of economically disadvantaged students

Blue dots represent individual schools, while orange lines represent the average trend. Sample limited to schools that participated two or more times in a Canopy survey and reported demographic data (N = 239).

Figure 5: Percentage of Socioeconomically Disadvantaged Students

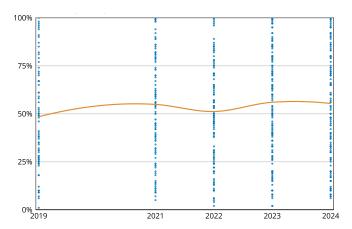


Figure 6: Percentage of Students
Designated as English Learners

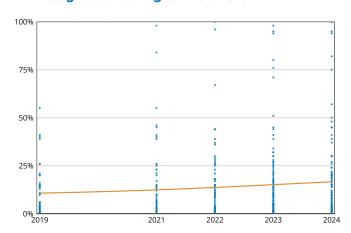


Figure 7: Percentage of Students of Color

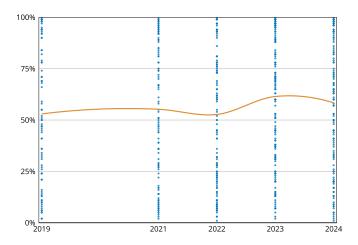
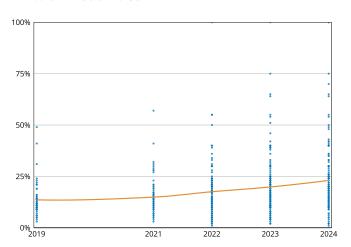


Figure 8: Percentage of Students with Disabilities



On average, enrollment in Canopy schools has also remained relatively stable. We saw some exceptions to this, however. For example, Valor Preparatory Academy in Arizona opened in 2020 with 24 students and grew tenfold by 2024, whereas Hazen Union High School in rural Vermont has been seeing a slow enrollment decline over decades due to demographic shifts. It's also worth noting that some schools could grow but don't have space; others are opening new sites but not growing enrollment in existing sites (see Part 3 for more detail on how Canopy schools are growing).

After five years of studying Canopy schools, it's clear that innovation doesn't arise only in a limited set of circumstances or as a luxury for privileged learners. The implication—perhaps radical in some circles—is that reimagining learning environments in school-wide, enduring ways is possible anywhere in the country, in any kind of school, for many different types of students. Indeed, it is underway.

Part 2: Canopy schools' designs balance consistency and evolution over time

Canopy leaders have consistently described how they are designing learning environments that are notable departures from traditional approaches to schooling. Our past research has shown that Canopy schools prioritize welcoming and culturally affirming learning communities that support students beyond academics, where students learn in active ways that connect to the real world, and where learning is flexible and responsive to student and family preferences. Schools are drawing from a wide range of teaching and learning practices that depart significantly from the status quo, and many have used these practices for a long time—even before the first Canopy survey in 2019.

One of the Canopy project's goals is to investigate how schools are innovating, which includes whether they are changing their designs over time, and how. Those answers can provide some empirical evidence for the kinds of approaches that are gaining traction (or not) in forward-thinking schools.

Our investigation into changes over time revealed a striking consistency in what school leaders report year after year. This stability is remarkable—it highlights that the student-centered designs these schools use are continuing to meet their needs. In interviews, leaders emphasized that the pandemic reinforced the value of their original designs, rather than signaling a need for change. Where schools did introduce changes to their designs, it was generally to adopt new practices slowly and steadily, with most changes having happened at the height of the pandemic. On average, schools that responded to Canopy surveys at least twice over time added 11 practices between 2019 and 2024. There are also revealing patterns in which kinds of practices schools have adopted, and when.

To capture a snapshot of each school's design, the Canopy project uses a tagging system in which each tag represents an innovative practice. In surveys each spring, school leaders are asked to identify which practices they are implementing at a school-wide level (not just in specific departments or classrooms) during the school year. For example, "project-based learning" is one of the most frequently reported school-wide practices. Our list of practices is updated annually based on research, expert insights, and survey feedback. All 87 practices used for two or more survey years can be viewed here.

For this section, we analyzed data from the 119 Canopy schools that had at least three different years of survey responses. This means that our results show changing survey responses over time within schools, not just changes in the sample of schools in the Canopy project. When we say schools are implementing "new" practices, this means the school leader initially didn't report implementing the practice on a Canopy survey, and then began reporting it on a subsequent survey.

This section also features analysis about what practices schools plan to implement in the future. For this analysis, we drew on the 189 schools that responded to the Canopy survey in 2024. On that survey, school leaders could report up to five practices that they plan to begin implementing in the next five years.

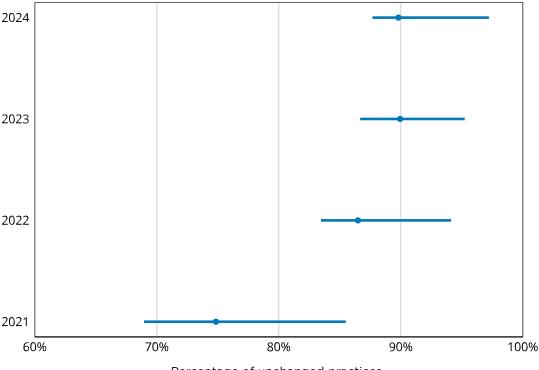
^{1.} The tagging system was originally developed in the fall of 2018 by reviewing existing tagging systems and frameworks for personalized learning, then making additions and changes with help from Canopy advisors. Since then, the tagging system has undergone structural changes and annual updates in response to new research and insights about innovative practices. In some cases, codification of concrete practices lags behind the rhetoric and energy around certain themes. In these cases, we draw as much as possible on emerging frameworks, interviews with experts and Canopy advisors, and suggestions from previous school design surveys to generate tags for the Canopy system that do not have precedents in other existing tagging systems.

Canopy schools' designs have been remarkably consistent from year to year

In the years since Covid struck, Canopy schools haven't dramatically upended their designs. In SY2020-21, a year of extreme pandemic disruption, 75% of the practices schools reported using remained the same as those they had reported using the last time they had completed a survey (in 2019, prior to the pandemic). We called this a "consistency rate"—the proportion of practices that remained consistent between survey responses. In SY2021-22, that consistency rate rose to over 85%, and rose again to 90% in SY2022-23 and SY2023-24.²

Figure 9: Consistency of Canopy Schools' Practices Over Time

Percentage of practices unchanged from Canopy schools' previous response. Dots indicate the average, while bars highlight where the middle 50% of responses typically fall. Sample limited to schools that participated 2 or more times in a Canopy survey (N = 263).



Percentage of unchanged practices

In the broader K-12 sector, schools have been criticized for not being more agile and adaptive in the face of disruption—so is consistency a good thing? Canopy schools show that it's possible to be adaptive and responsive without leaving behind the school's core beliefs about what works for kids. Jeff Palladino, from Fannie Lou Hamer Freedom High School, said that due to the pandemic, there have been "more changes in the last five years than there were in the previous 25." But those changes were actually in service of maintaining the school's ability to create the engaging, flexible, empowering learning environment that founders envisioned from the beginning.

^{2.} Sometimes when schools made changes to the practices they'd previously reported, especially at the height of Covid, it was not a permanent change but a temporary one. It was especially common in SY2020-21 for schools to add a practice and then remove it in a later year, or remove a practice and then add it back in a later year—a phenomenon we called "switchbacks." Practices that were subject to switchbacks are some of what account for the lower consistency rate in the 2021 survey results, but because these practices amount to short-term instead of long-term changes, this actually strengthens the idea that schools' approaches have remained fairly consistent over time—albeit with some pandemic interruptions. (See our supplemental resource for more detail on switchbacks.)

For Canopy schools with an innovative approach, consistency means sticking with that approach because it's driven by a core belief about what school can, and should, be. While their schools have changed over time, leaders told us that innovation doesn't necessarily mean constantly pursuing major changes. Buffy Cushman-Patz from SEEQS put this succinctly: "It's not always about changing. It's about evolving." Amanda Cox from Future Public School said, "The biggest changes [we made] are just in refining, iterating, shoring up, building our institutional knowledge." Nearly everyone we interviewed said that the pandemic reinforced their commitment to the values and beliefs that originally informed their schools' designs.



SCHOOL SPOTLIGHT: STAYING TRUE TO CORE PEDAGOGY THROUGH RAPID CHANGE

Science Leadership Academy (SLA), a public high school in Philadelphia, stayed true to its core educational values throughout the pandemic, leaning heavily on its blended learning model. "On some level, I would argue that we actually haven't changed that much in the last five years, as far as what we believe and what we think are the best tools," said founding principal Chris Lehmann. While many schools drastically altered their teaching models, SLA continued its inquiry-driven, student-centered approach, where in-person and digital learning were already well integrated.

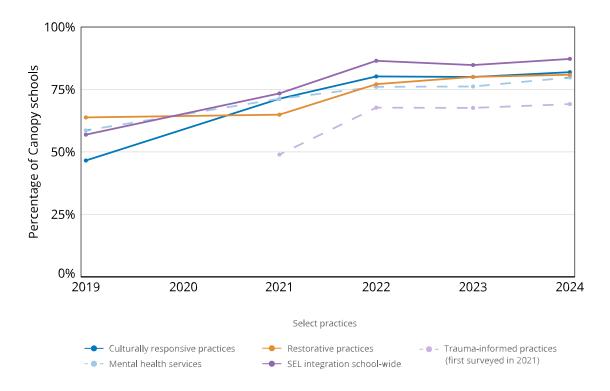
Although the school adapted to meet changing student needs and new technologies, technology remained just one part of the equation. As students returned to in-person learning, the school reflected on how its practices balanced digital tools with face-to-face learning, all while staying true to its mission. Moving forward, Science Leadership Academy continues refining its model, ensuring that technology supports, rather than replaces, their strong pedagogy and vision. "The modality is not important, the pedagogy is and everything is in service [to] the pedagogy."

Since 2019, many schools have focused on student well-being and equity, engaging and relevant instruction, and postsecondary pathways—though at different rates over time

At the height of the pandemic, schools focused especially on student well-being and equity. Since Canopy began surveying schools, many more schools have begun to integrate social and emotional learning across academic subject areas. More schools are also designing instruction to better reflect cultural diversity and help marginalized students develop independence as learners and designing disciplinary systems to focus on restoring relationships rather than meting out punishment. At a time of heightened youth anxiety and depression, schools have begun providing mental health services and helping teachers respond to students' traumatic stress. The percentage point growth in schools reporting these practices is in the double digits in some cases (See below and view our <u>Supplemental Resource</u> for more detail).

Figure 10: Changes in Select Practices Related to Student Well-being and Equity 2019–2024

Sample limited to schools that participated 3 or more times in a Canopy survey (N = 119).



School leader voices: Social and emotional learning plans

"All of our kids at our school have what we call learning partnership plans [in which we] highlight the areas that they're excelling in academically, areas that they need to be pushed on academically, but also doing the same for their social-emotional learning as well."

-DeKalb Brilliance Academy

The adoption rate for practices related to student well-being and equity was highest from 2019 to 2022 during the period of most school closures, which also coincided with calls for racial justice after George Floyd's murder. As time has gone on, that adoption rate has slowed: some schools have continued to adopt these practices, but not as many as before.

The pandemic was a direct catalyst for some of the new work schools were doing to support student well-being. At Howard University Middle School for Math and Science, a public charter school in Washington, DC, school leader Kathryn Procope said, "People lost family members, so we had to make sure that we were able to deal with the grief and trauma." Additionally, during remote learning some students had forgottenor simply hadn't learned in the first place—the social skills necessary for in-person, group learning. Kelly Tenkely from Anastasis Academy said she saw a lot of developmental delays, "So it's like you'll have a kindergartner [who's] responding to conflict or things as if they're a toddler, and third graders who are looking more like first graders." Both schools, as a result, began explicitly teaching social and coping skills in a way they hadn't before.

Leaders also said that broader political and cultural forces were reasons for beefing up student supports. Discussing both social media and increasingly radical political debates, one leader from 5280 High School said, "I think it is harder to be a teenager now than ever. . . . [It's] pushing our students to have more and more need for support in order to avoid escape or self-harm." Schools are one, if not the only, source of

that kind of support outside of students' home lives. Since the pandemic, 5280 has increased the number of recovery and mental health professionals on staff and started "a student leadership group that's about how we approach recovery . . . helping develop our practices and policies and interventions."

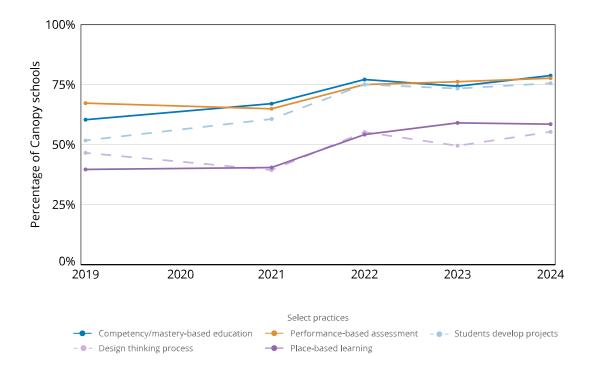
In most of our interviews, leaders of Canopy schools said their schools already had some foundational practices for supporting student well-being and educating diverse learners, but the pandemic prompted them to "double up on it," as Procope said. Steve Magadance from the International School of the Americas, a public district high school in San Antonio, Texas, said that supporting diverse learners was always what the school intended to do, but "Covid and many of the events of May 2020 helped illuminate the need" for a more concerted focus.

Since the pandemic, schools have renewed their focus on relevant, engaging instructional approaches that help students develop durable skills. More Canopy schools have adopted instructional practices such as project-based learning, in which students learn through tackling real-world problems or finding answers to complex questions. More schools are also implementing competency-based systems, in which students move forward in their learning after demonstrating they've acquired certain skills rather than after getting a passing grade on a test. These kinds of approaches, and others like them, in some cases saw double-digit increases in schools over the course of five years.



Figure 11: Changes in Select Practices Related to Relevant and Engaging Instruction 2019-2024

Sample limited to schools that participated three or more times in a Canopy survey (N = 119).



Schools adopted these practices for relevant and engaging instruction less frequently at the height of the pandemic, and more often after it began to recede. For instance, "performance-based assessment," in which students demonstrate their learning through methods other than traditional tests, declined from 67% of schools implementing it in 2019 to 65% in 2021, before jumping to 78% of schools implementing it by 2024. Design thinking, in which students identify challenges and refine and test solutions, also declined from 2019 to 2021, meaning that some schools either temporarily or permanently stopped using this process as an instructional method. Overall, the trend suggests that these practices were less a solution for pandemic remote learning, and more a solution for the return to in-person learning in the pandemic's wake.

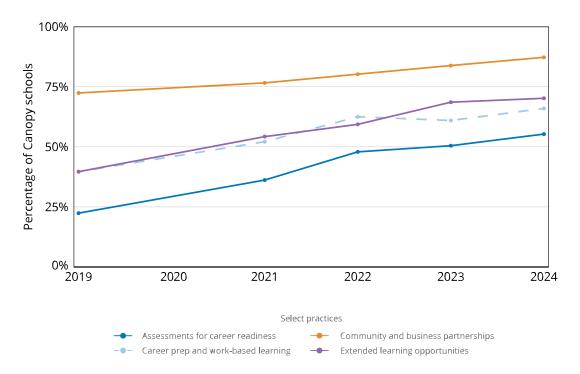
Even in schools that already implemented these kinds of instructional approaches, an initial focus on student well-being at the height of the pandemic was quickly followed by a refocus on academic rigor and intellectual challenge. At Fannie Lou Hamer Freedom High School in the Bronx, leader Jeff Palladino said that the school was at the "epicenter of the epicenter" during the pandemic. The community completely shut down, and the degree of loss was so high that at one point Palladino was sending a weekly email with "Here are the people we lost this week," like Vietnam." In that context, when schools began to reopen, the focus was on "joy . . . and rebuilding community and welcoming young people back to our schools." But, he said, "we're not running a summer camp here, either. It's a place where you're pushing intellectual thinking and academic work." The school uses interdisciplinary and project-based learning extensively in its instructional approach, and while it never abandoned that during the pandemic, the recovery period has brought on a new focus to help students rebuild their "academic stamina."

Over time, schools have steadily and consistently expanded their work on postsecondary pathways.

Canopy data show that more schools over time are working to prepare students for college, career, and adult life, as well as designing learning experiences for students to have outside of school walls ("extended learning opportunities"). High schools are largely, though not exclusively, driving the adoption of these practices. Schools have been adopting these practices steadily, including during the pandemic.

Figure 12: Changes in Select Practices Related to Postsecondary Pathways 2019-2024

Sample limited to schools that participated 3 or more times in a Canopy survey (N = 119).



We heard from many Canopy high school leaders that they're increasingly working to help teenage students envision and experience what their lives might look like as adults and get a head start on a pathway toward that future. The school leader at GALS reflected that one major theme in how the school has evolved in the last five years is through the idea of "connecting the high school experience to whatever the lived experience of that student will be once they leave." About half of GALS graduates go on to a four-year college; others transition into the workforce or enter trade or technical schools. To help students make a choice that's right for them, the school partnered with community colleges to offer concurrent enrollment to all interested students, found a sponsor to pay for technical and trade school scholarships (which, compared to college scholarships, are far harder for students to find), and began working with a group that facilitates internships with local businesses. The school is beginning to see that students are developing a broader sense of their options: those who weren't at first considering college are trying out community college classes while in high school, and those who might have gone straight into the workforce are now choosing to continue their education with an apprenticeship or by earning a certificate or even a higher education degree.

But creating a robust set of expanded learning experiences, career pathways, or community partnerships is not easy work, and in some cases the pandemic may have been a stumbling block. At Fannie Lou Hamer Freedom High School, where work-based learning is a norm for every student, the school paused most in-person internships during Covid. As a result, the school's leader said one part of pandemic recovery involves rebuilding the partnerships with internship providers. "I still think we're not where we were pre-pandemic," he said.

WERE INNOVATIVE SCHOOLS BETTER PREPARED TO FACE THE PANDEMIC?

Carol Bowar at Girls' Athletic Leadership Middle School (GALS) in Denver called the pandemic "a gigantic meat grinder that disrupted public schooling in all kinds of different ways." Through interviews with Canopy leaders, we learned that some schools pivoted easily to remote instruction and cited existing technology infrastructure and learning culture as key ingredients for success. In other cases, schools whose core instructional model relied on work-based learning found the transition far more challenging.

- Tyler Thigpen, founder of **The Forest School: An Acton Academy** in Fayetteville, Georgia, said that the school's <u>approach to self-directed learning</u> and agency created a more seamless transition from in-school to remote learning during quarantine. The experience ultimately led to the founding of The Forest School Online, which has grown as a virtual school emphasizing the same self-directed learning approach.
- For **Science Leadership Academy,** a public high school in Philadelphia, the transition was smoother than most. "We actually weathered the storm of the pandemic better than most," shared founding principal Chris Lehmann. Thanks to their strong blended learning model, in which technology was already a key part of daily instruction, students were comfortable with digital tools. This infrastructure allowed the school to move online quickly and maintain steady graduation rates, retention, and test scores.
- From an instructional perspective, Art Smith of **Liberty Academy** said that in some ways his school was "already built for Covid." The school already had elements in place to "let a kid personalize their own [learning] menu, do their own projects, and [demonstrate] evidence" of learning to earn credit. Given the school's existing technology platforms for learning, "it didn't really matter where [learning] happened." Because core instruction could continue relatively seamlessly, the school was able to put more energy into outreach to families with whom they lost contact.
- In contrast, the CEO at the Center for Advanced Research and Technology, in California, said that "Covid just about destroyed us." Converting a highly hands-on, project-based learning approach to an online environment was challenging, and even though teachers were amazingly creative, they were never able to fully replicate the rich experiences students had been having pre-pandemic in-person. And since the school enrolls students and employs teachers from across two districts, it was stuck between a rock and a hard place when the two districts developed very different Covid response policies, including when teachers were expected to return to school buildings.

Schools did more blended learning during the pandemic, but may be doing less—or doing it differently—since then

When we analyzed the practices that schools reported implementing over time, adoption numbers for most were growing or remaining stable. But the biggest exception was blended learning, or the integration of online learning in brick-and-mortar schools to allow students more control over the time, place, path, or pace of their learning. Canopy schools seemed to have actually stopped reporting blended learning approaches in significant numbers. Because of the explosive growth of device and internet access for K-12 students during the pandemic, this trend in Canopy data seemed counterintuitive: wouldn't the pandemic have naturally led to more blended learning?

METHODOLOGY NOTE: BLENDED LEARNING PRACTICES

Canopy tracks six blended learning practices in total. One is a more general practice called "blended learning," meaning that students learn through a mix of online and in-person instruction. Surveys also allow leaders to report five specific "models" of blended learning—a la carte, enriched virtual, flex, flipped classroom, and station rotation—that describe different ways of using online and inperson instruction.

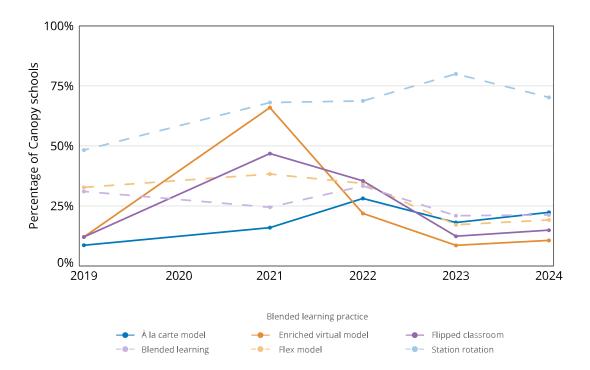


A closer look revealed that the pandemic may have been a watershed moment, and that since then certain types of blended learning seem to be receding from use. From 2019 to 2021, through the height of the pandemic, many more schools reported using "blended learning," as well as two specific models: "enriched virtual" (with a 54-percentage point spike) and "flipped classroom" (a 35-percentage point spike). In a flipped classroom model, students have inperson instruction at school that's supplemented by online learning at home, and in an enriched virtual model, students complete the majority of their coursework online and outside of the school building but attend school periodically for face-to-face learning sessions. These two models likely made most sense for schools to adopt as solutions during pandemic school closures or "hybrid" learning, since both of them combine online learning outside school with face-to-face learning in school.

Schools quickly stopped implementing those two models in 2022, with further decreases in more recent years. And while more schools continued to report using the overall "blended learning" practice through 2023, the 2024 survey showed a slight decrease. Meanwhile, two other models—"station rotation" and "flex"—are also being used less often over time, and neither saw notable spikes in adoption during the pandemic. (See our supplemental resource for a detailed discussion of blended learning trends in Canopy data.)

Figure 13: Changes in Select Practices Related to Blended Learning 2019-2024

Sample limited to schools that participated three or more times in a Canopy survey (N = 119).



Furthermore, our survey data don't suggest increased future interest in blended learning. When we asked school leaders about practices they plan to pilot in the future, very few schools indicated blended learning practices, except for the "à la carte model": eight schools hoped to pilot online courses that students take with an online teacher in addition to other face-to-face courses at school.

Our analysis of both survey and interview data suggests that what may be happening is less a turn away from blended learning, and more an evolution of it. For instance, interviews suggested that some schools have retained pandemic-era experiments with online, hybrid, and blended learning, but none of them quite fit the categories that blended learning researchers originally documented in the early 2010s. Howard University Middle School for Math and Science offers an example of this (see sidebar). Alternatively, because the pandemic made it commonplace to use some form of online learning in schools, some school leaders may no longer consider it an "innovative" practice worth highlighting. Another possibility is that schools are continuing to implement blended learning but using different language to describe it, as has happened at Mott Haven Academy (see sidebar).

Although we didn't interview any school leaders who stopped implementing blended learning completely, we did hear from some leaders who emphasized the importance of in-person learning. For example, Valor Preparatory Academy increased the face-to-face components of their blended learning models rather than the online components (see sidebar). And Chris Lehmann from Science Leadership Academy reflected, "The biggest thing we took away [from the pandemic] is that our pedagogy is strong, and we are very much a brick-and-mortar school. Blended is blended, not virtual."

SCHOOL SPOTLIGHTS: THE EVOLUTION OF BLENDED LEARNING

- At Howard University Middle School for Math and Science, leader Kathryn Procope said, "We recognized that there are some children who just do better when they're not social . . . when they're online. Zoom works for them. And so [we're] taking a hard look at where our kids' strengths are and playing to [those strengths] in how we teach them." After returning to in-person learning, the school retained Wednesdays as a half-day when students go home for online learning in the afternoons. Teachers can use that time for professional development, but it's also time for students to meet individually online with their teachers. Procope said that when students don't engage in group classroom learning, "a lot of times it's because they're behind and don't want anybody to know." But those same students are often "consistent" in meeting with teachers online on Wednesday afternoons "because there's no threat and it enables them to achieve and feel success. . . . They still don't say anything in class, but they're always there on that Wednesday afternoon."
- At **Mott Haven Academy**, a public PK-8 charter school in New York City, blended learning models like station rotation, flipped classroom, and à la carte continue to play a role—but the terminology has shifted since the pandemic. "All those practices still are in place," explains head of school and founding leader Jessica Nauiokas, "we just probably don't spend as much time describing and capturing them the way we would have in those years past." Station rotation remains a core part of K-8 instruction at Mott Haven, while flipped classrooms have become integrated into rotations. Meanwhile, the à la carte model has become a flexible approach to meet students' varied needs through differentiated instruction and the use of multitiered systems of support. Nauiokas noted that both the terminology and structure of blended learning practices have evolved at Mott Haven Academy, while the underlying vision of personalized learning and student choice remains foundational to the school's approach.
- Valor Preparatory Academy, a charter school in Arizona, was originally built as a "hybrid" school where students would attend school on some days but not others. But that meant that a student who missed one or two in-person days might not have contact with peers for a week or more. The pandemic's impact on students' learning and social development taught school leader Dan Mahlandt that students "needed more face-to-face; they needed more interaction with other kids. . . . And I've seen that multiply every year." Now, students at Valor must attend school for a portion of every day (except Fridays, which are optional but "for pure relationship-building"), with the remainder of the day dedicated to either in-person tutoring or home-based online learning. Blended learning is still central to the school's approach, but the need for regular face-to-face interaction means that there are new parameters for how the school will grow—since brick-and-mortar space is still critical for every student to access on a regular basis.

One thing is clear, though: regardless of whether schools' blended learning strategies are changing or receding, most Canopy school leaders remain committed to some form of personalization in student learning. Over time, more Canopy schools have adopted self-paced learning, in which students can move ahead when they're ready or linger for more practice if they need it. More schools are helping students set their own learning goals and allowing students to access their own learning data. Reported implementation of "universal design for learning"—a strategy for designing learning environments that proactively meet the unique needs of all learners—has shot up from 26% of schools in 2019 to 60% in 2024.

Such personalization at scale will likely need a technology enabler, as early researchers of blended learning argued. Blended learning research <u>illustrated</u> not only how schools could weave together online and face-to-face instruction, but also how this could unlock more personalized instruction and differentiated teaching roles. However, using online learning in a traditional instructional model had only limited ability to change students' experiences, whereas new instructional models leveraging the unique capabilities of technology could enable far greater differentiation and student-driven learning. Especially as schools begin adopting artificial intelligence-powered educational technologies, educators need updated research that documents how innovative schools are powering innovative instructional approaches with the help of technology tools.

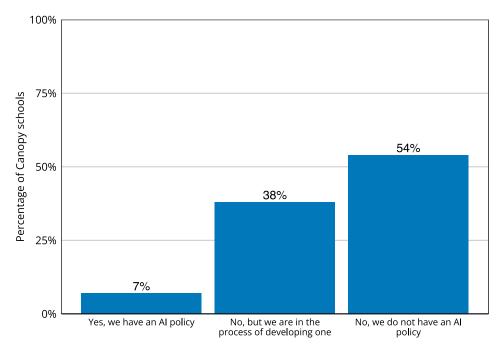
Many schools are eager to leverage AI, but only a few are advanced early adopters

Some Canopy schools have used forms of AI for years: in our 2022 survey, 43% of leaders reported that their schools adapt learning content to individual students, such as through adaptive software. But given the recent advances in generative AI, we used the 2024 Canopy survey to investigate whether and how schools were developing AI policies or creative uses of AI.

Only 7% of Canopy school leaders said they have a policy in place governing students' use of generative AI, but another 38% said they're in the process of developing one. These responses are in line with other schools nationally, based on a representative survey of districts from fall 2023 where 5% of district leaders said their districts had adopted such a policy, and another 31% said their districts were developing one.

Figure 14: Schools' Adoption of Policies for Student Use of Generative Al

Sample limited to schools that participated in 2024 Canopy survey (N = 189).



Despite the shortage of formal policies, experimentation appeared abundant. About three in ten schools responded to an optional question by describing ways they're currently leveraging Al. Leaders' responses ranged from light experimentation outside of classrooms ("mostly for administrative tasks"), to fully embracing AI as a tool for learning ("We have trained a GPT on our model, our writings, and our curriculum to help personalize learning"). Leaders' responses mostly reflected positive and hopeful attitudes about AI as a way to help make teachers' jobs easier and to enable richer learning experiences rather than watered-down ones. They're interested in using AI to personalize learning, streamline teachers' work, prompt discussions about ethics and creativity, improve math learning, and give students formative feedback more frequently. Leaders are also

cautious about privacy and ethics, and want to see more guidance and best practices.

A few school leaders described advanced uses of AI, and follow-up interviews offered a glimpse into these early adopters (see sidebar). However, most other survey responses pointed to limited early experimentations, and the majority of schools didn't share any ways they're using Al. Other research has found that the complexity and rapid advancement of AI make it difficult for educators and leaders to understand what it is, how to make use of it, and how to mitigate risks. Additional research could help document the distinct approaches early adopters are taking when leveraging AI, and also what attitudes innovative school leaders hold toward Al, including barriers they face in accessing and leveraging it.

SCHOOL SPOTLIGHTS: AI EARLY ADOPTERS

- Anastasis Academy, A K-8 microschool in Centennial, CO, has integrated artificial intelligence into curricular planning and individualized instruction. By training the AI on their entire curriculum and methodologies, teachers can now more easily access educational resources that align with the school's unique learning approach. This innovative use of AI allows educators to engage with the school's ethos and curricular content more deeply. The practical applications of AI at Anastasis Academy are especially impactful in the realm of individualized learning. By inputting anonymized learner profiles, the school's AI model can understand the unique needs of each student, allowing for personalized lessons and models that cater to each student's unique needs and characteristics. This approach helps teachers make the learning experience more adaptive and responsive to the diverse needs of their students, without the burden that doing so might otherwise require.
- **NuVu High School**, a high school in Cambridge, MA, has no traditional classes; instead, students engage in immersive, hands-on project-based design studios. The flexibility of NuVu's <u>studios</u> fosters deep learning, moving beyond rote memorization. Recently, AI has become a prominent topic within these studios, prompting students to examine its ethical implications, biases, and applications in real-world settings. As Karen Sutton, chief of staff at NuVu, explains "A studio can be anything from how AI can be used in Communal Computing to help improve remote meetings, to the issues of ethics and inherent biases within an AI based design studio."

SCHOOL SPOTLIGHTS: AI EARLY ADOPTERS (CONTINUED)

South Bronx Community Charter High School, a competency-based school in New York City, relies heavily on project-based learning, which is "not easy to grade," said co-founder John Clemente. The school operates on a system of 66 "attainments" that students must demonstrate, but developing rubrics for each attainment and providing students with frequent, personalized feedback is time-intensive for teachers. Recently, the school has begun experimenting with AI as a tool for generating rubrics and providing formative feedback to students. These experiments are paying off: students have appreciated faster feedback loops on their work, and Clemente said the rubrics generated by AI needed to be revised, but were "in really good shape." "It's really powerful," he said, because "we're always asking teachers to do more. Particularly in the last three or four years. . . . Build more relationships. Deal with all the anxiety students have. Deal with the social isolation that they've experienced now. Deal with the learning loss due to the pandemic." If some of that demand on teachers can be reduced by using AI tools for performance-based assessment, "the amount of time that can save for an individual teacher is very significant."



Part 3: Canopy schools anticipate growth and challenges ahead

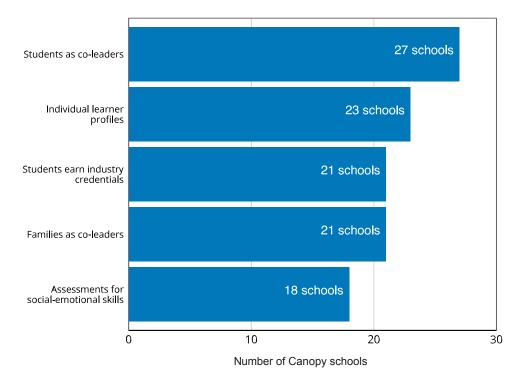
The key findings in this section draw from Canopy's most recent survey in spring 2024 (with responses from 189 schools) and follow-up interviews where we asked school leaders about what the future holds—as well as what's holding them back.

Going forward, schools want to partner more deeply with students and families

When we asked Canopy school leaders about the practices they hope to pilot in the coming years, their responses were numerous and wide-ranging. Among the 73 practices that leaders could choose from, 72 practices were selected by at least one school. The most frequently selected practices school leaders hope to pilot indicate where school leaders' greatest interests are concentrated.

Figure 15: Top Five Practices Canopy Schools Plan to Pilot in the Next Five Years

Sample limited to schools that participated in 2024 Canopy survey (N = 189).



School leaders showed substantial interest in piloting approaches that help them share power with students and families. Nearly a quarter (23%) of all schools responding to the survey said they want to pilot shared decision-making ("co-leadership") with families, students, or both. (The survey described co-leadership as "[involving] stakeholders in the process of decision-making and [communicating] how the input gathered from stakeholders informs decision-making.") If the schools that hope to pilot those practices in the future actually do so, that will mean a 46% increase in the number of Canopy schools co-leading with families, and a 36% increase in the number co-leading with students.³

^{3.} Among the schools that responded to the 2024 survey, 116 schools (61%) reported some form of co-leadership. Among those, 46 schools reported co-leadership with families, and 76 schools reported co-leadership with students. (Schools could also report co-leadership with teachers and with community partners.).

Schools' interest in piloting co-leadership practices could suggest that they are on the vanguard of a shift in how schools partner with communities. During the pandemic, schools had to rely on parents to facilitate remote learning, and many parents expressed a desire—even a demand—to have more of a say in schools. This demand was part of what catalyzed the founding of DeKalb Brilliance Academy in Decatur, Georgia. "Families felt more disengaged, more disconnected," said co-founder Jocelyn Alter. "Their needs were less seen, less honored, throughout the pandemic." The demand to be more involved, she said, "was never not there . . . [but it] got louder." Beginning with family focus groups, DeKalb Brilliance Academy sought to involve caregivers from the start, and this ethos remains central to their approach (see sidebar).

SCHOOL SPOTLIGHT: LEARNING PARTNERSHIP PLANS WITH FAMILIES

DeKalb Brilliance Academy, a public charter elementary school in Decatur, Georgia, that was founded in 2022, creates what it calls "learning partnership plans" to bring students and caregivers to the table with teachers in setting learning goals and evaluating progress. Learning partnership plans include both academic and social-emotional elements, and they're created at the start of each school year after interviews with caregivers and students. Then, the plans are revisited regularly during student conferences. where the conversation focuses on how both families and teachers will help students reach their goals. The plans are designed to include both qualitative progress notes—showing that teachers know and care for each student individually—as well as information about how the student is performing relative to grade level expectations, which research shows is <u>rarely transparent</u> for families. By the end of its first year, the school's own surveys showed that 96% of parents felt well-informed about their child's learning progress, and two-thirds of students met their NWEA MAP growth goals in ELA and Math.

Finding the right structures and methods for involving families is challenging, especially if families have different degrees of availability, which can lead to inequitable participation. Kelly Tenkely said that at Anastasis Academy, "Success looks [like] . . . a close-knit community that's doing life together, that we're partnered with parents while we're working with kids." However, in her experience of the post-pandemic landscape, "parents are pulled in so many directions that it's harder for them to push into the school in the ways that they were able to in the past." Some parents increased their working hours to make ends meet; some have also become habituated to a more home-based life after pandemic quarantines. Tenkely said the school is working on "rebuilding" family partnerships in "our new reality," and seeing some positive signals. Right before winter break in late 2023, the school was hit with multiple crises related to facilities and staffing. "Everything was breaking at the same moment really in big ways . . . so we held a community 'all hands on deck." In the meeting, Tenkely noticed a positive development: whereas in the past she tended to see mostly mothers at these meetings, this meeting was "almost exclusively dads. . . . We've never, ever seen that level of involvement from dads." With the help of families, the school was able to navigate the crisis moment, and is continuing to construct a new normal in family partnerships.



SCHOOL SPOTLIGHT: BEGINNING TO SHARE POWER WITH STUDENTS

In response to student feedback about feeling disconnected from adults, West Hawaii Explorations Academy, a public 6-12 charter school in Kailua-Kona, HI, has begun involving students in decisions affecting curriculum, policies, and campus culture. For example, students help vet new staff and visit inspirational schools to learn what it looks like for schools to help students develop personal agency. "We've become more deliberate in sharing control with students," said principal Joe Greenberg, emphasizing the move beyond token gestures. These changes have led to more student-led initiatives to improve campus culture, supported by social-emotional learning programs and activities promoting advocacy and allyship. While progress is gradual, the school is building a more inclusive, empathetic environment.

Some leaders have their sights set on growth

On average across Canopy schools, our analysis from the past five years didn't show dramatic growth (or decline) in student enrollment. But some schools buck that average trend, and others are trying to grow in the future in ways that won't necessarily appear in the enrollment numbers for their individual school sites.

In our follow-up interviews with leaders, we heard a common theme about growing schools in the years to come. In many cases, this meant physical growth, such as increasing student enrollment, opening new campuses, or expanding on existing spaces. Some schools are opening up new grade levels and enrolling new students; others are moving into—or raising money for—newly renovated buildings (see sidebar). Some microschools have opened new campuses over the last five years and plan to continue doing so. Purdue Polytechnic High School's former director, Scott Bess,

noted that in contrast to full-size high schools, microschools can take advantage of existing smaller community spaces (like church buildings) instead of requiring new facilities, trim some administrative costs, and reach smaller rural communities where the population can't sustain a new large high school. Smaller schools can also more easily accommodate individual schedules for students, which can be helpful when students' internships occur at all different hours.

SCHOOL SPOTLIGHTS: GROWTH AND EXPANSION

- At DeKalb Brilliance Academy in Decatur, Georgia, the elementary school's third year of operation includes welcoming its inaugural fourth-grade class—and setting its sights on opening a new middle school.
- Howard University Middle School for Math and Science will be moving into a newly renovated building that the school will share with Howard's School of Education, which means expanded access to student teachers.
- Anastasis Academy, faced with aging facilities, is hoping to raise money for a new greenhouseinspired school building that could also be rented as community space for additional income.

At the same time, growth is not limited to physical expansion. Some leaders we spoke to are codifying their school models by developing formal frameworks, sharing curricular materials, and training teachers. Schools like CodeRVA Regional High School in Richmond, Virginia are focused on scaling up their innovative model by expanding their curriculum—which integrates computer science with other core classes, like humanities—to more subjects and sharing it with other schools. At a small scale, CodeRVA is also training new, in-demand computer science teachers in partnership with the teacher residency program at Virginia Commonwealth University. Many leaders with similar ideas reported hoping that their schools will not only positively impact enrolled students, but also contribute to accelerating innovation across the broader education ecosystem.

Leaders also see growth as a way to deepen their schools' integration into the local community. Kelly Tenkely from Anastasis Academy, who described wanting to raise funds for a new building, envisions the new Anastasis facility as a hub for the community and not just a location for the school. The space would be used for teaching and learning but could also be rented out as a yoga studio or other community space via a benefit corporation (B-corp) that the school would run, with income benefiting the school. Such a model could "engage the community around the school in a different way," said Tenkely, since even people without children enrolled in the school could feel invested in it by virtue of sharing the space. According to Tenkely, this integration is critical to sustaining the school and building broader support networks beyond enrolled families.

But determining where, how, and when to grow can be challenging. For example, at Future Public School in Boise, ID, some signals point to demand outpacing the supply of seats while others suggest the opposite. On the one hand, founder Amanda Cox continues to see increased interest from families of students with disabilities. Cox's hypothesis is that these families aren't getting their needs met by the district and are opting for Future's full inclusion model. On the other hand, enrollment numbers are down for Future's kindergarten class, in large part because a change in the state's funding model

has led to more public district schools offering full-day kindergarten—something Future has always offered, but wasn't the norm for district schools when Future was founded. The increased kindergarten offerings from district schools is "great," Cox said, because "we wanted to be a trailblazer" and push other schools to prioritize kindergarten. But more kindergarten options has also meant slightly lower demand for Future's kindergarten, leading school leaders to feel unsure about whether action is needed to boost enrollment numbers.

In the end, resources are central to the question of growth—and resources, both financial capital and human capital, are some of the biggest issues keeping Canopy school leaders up at night.

Sustainability is a big concern for innovative school leaders

In a previous Canopy report, we found that public and private funding has a major impact on Canopy school leaders' ability to innovate. In this year's survey, we found that the majority (61%) of Canopy school leaders are "extremely" or "somewhat" concerned about having adequate resources to sustain their work in the next five years.

This level of concern was not equally distributed, especially with respect to racial identity and governance. In schools where people of color make up the majority of the leadership team, school leaders responding to the Canopy survey were more concerned about future sustainability than their peers.⁴ And charter school leaders expressed more concern about sustainability than others, but school leaders in traditional districts were more often "extremely" concerned. Independent school leaders were more evenly divided between those with concerns about sustainability and those without—but overall, independent school leaders were least likely to have concerns about sustainability compared to public district and charter schools.

^{4.} In fact, through statistical modeling we found that schools with 75% or more leaders of color were more than 20 times more likely to report concern than schools with 0–25% leaders of color, even when controlling for various school characteristics. Schools with 50–74% leaders of color were four times more likely to report concern than schools with 0–25% leaders of color.

Figure 16: Concern About Future Sustainability by Level of Racial Diversity in School Leadership

Leaders' responses to "Are you concerned about your ability to sustain resources for your learning environment over the next five years?" Sample limited to schools that participated in 2024 Canopy survey (N = 189).

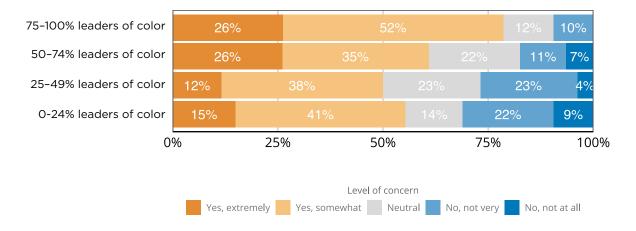
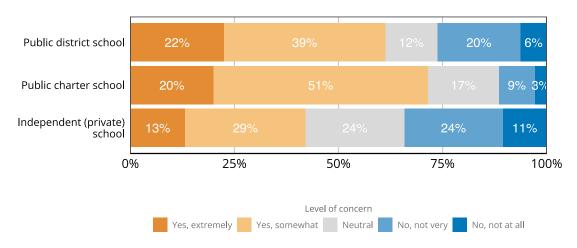


Figure 17: Concern About Future Sustainability by Sector

Leaders' responses to "Are you concerned about your ability to sustain resources for your learning environment over the next five years?" Sample limited to schools that participated in 2024 Canopy survey (N = 189).



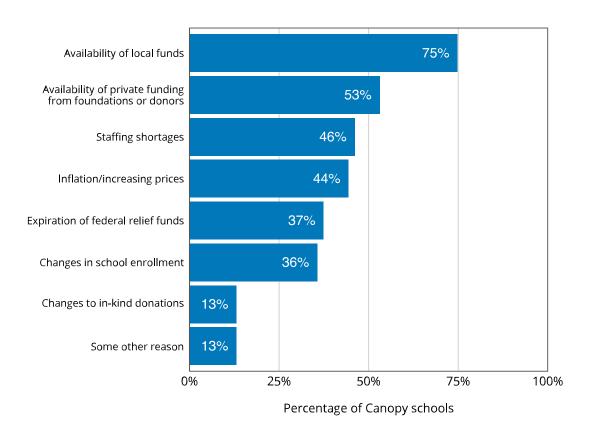
While we hypothesized that newer schools might be more concerned with sustaining resources, our analysis didn't bear this out. After looking at more established schools compared to newer ones (based on the number of years they've implemented key practices), we didn't see any notable effects on the level of concern that leaders expressed about resources in the future. Even among the more established Canopy schools, well over half of leaders said they're worried about having adequate resources.⁵

^{5.} To investigate how more established schools compared to newer ones, we used the length of time leaders reported implementing the school's core practices to divide schools into three categories: established, somewhat established, new or newly redesigned. Among established schools, 61% reported they were worried about having adequate resources compared to 60% of somewhat established schools and 64% of new or newly redesigned schools.

Local (including state) and philanthropic funding were top of mind among school leaders who expressed concern about sustainability.⁶ Nearly three-quarters of these leaders expected to be hindered by the availability of local funding. Independent school leaders were less likely to worry about local funding but shared concerns about philanthropic funding, as well as in-kind donations. As one independent school leader told us, schools that have been running for a few years shouldn't have long-term financial concerns if they've figured out their business models. But for public schools, even established programs can feel financial pressure if state and local budgets change. Rick Watson, a leader whose school—the Center for Advanced Research and Technology (CART)—is co-funded by two school districts, said that the state's budget deficit is likely to impact education funding, which means that there may be a reshuffling in what district budgets prioritize. Such a prospect makes him constantly wonder, "Where do we fit in the hierarchy?" He's heartened by ongoing interest in CART from both local families and visitors, but a superintendent transition in both host districts could mean an unexpected shift in priorities.

Figure 18: Barriers to Financial Sustainability - Canopy School Leaders Cited in 2024

Sample limited to schools that participated in 2024 Canopy survey and provided a response (N = 115).



Though not as many leaders reported that enrollment was a factor hindering their ability to sustain resources, geographic context and school size seemed to affect this. Through statistical modeling, we found that rural schools were more than four times as likely as urban and suburban schools to say that changes in enrollment hindered their ability to sustain resources. Additionally, small schools were more likely to be hindered by changes in enrollment.

^{6.} In the survey, if leaders responded "Yes, extremely" or "Yes, somewhat" to the question about whether they were concerned about sustaining resources, they were shown a follow-up question about which factors are hindering their ability to sustain adequate resources in the coming years.

Finally, nearly half of leaders concerned about sustaining resources said they were hindered by staffing shortages. In particular, schools with more people of color on their leadership teams were far more likely to report being hindered by staffing shortages—which, if these schools prioritize hiring teachers of color, could relate to the well-known lack of racial diversity in the teacher workforce. In the next section, we expand on how finding teachers is a challenge for Canopy leaders. At Canopy schools, teachers cannot simply be qualified; they must also have the right combination of background and training for innovative schools specifically.

Finding teachers with the right training is elusive

Staffing shortages and related issues rose to the top in several different survey question responses, as well as in interviews, showing that teacher workforce issues—and the pipeline for innovation-minded teachers—are at the forefront for Canopy leaders. Nearly half of leaders said staffing shortages are a factor hindering their ability to sustain resources for their work. And in a different question, teacher workforce issues were the top-selected issue that Canopy leaders think will have a major impact on K-12 education in the next five years.

When it comes to staffing their own schools, leaders we interviewed described the problem as two-fold. On the one hand, some are struggling to find and retain teachers, as is the case at many schools nationwide. A high school principal said that when she took on her first principalship in 2011, she could "trip over an art teacher in the parking lot." Now, she said, when she posts an open job, "I get three people [who] apply. One of them I think is a chatbot. The other two, I can only get one to interview." Daniel Mahlandt from Valor Preparatory Academy said that as a charter school in Arizona, Valor can't match the teacher salaries at public district schools. When a math teacher left for a \$15,000 pay raise at a district school, Mahlandt said, "Now I have to find a math teacher, and where is that human being coming from?" Writ large, the state of the teaching profession and crumbling pipelines came up as a major theme in many of our interviews when we asked leaders about what they think will affect the education sector as a whole in the coming years.

But Canopy school leaders face another, unique issue related to staffing. Regardless of whether they personally experience teacher shortages. innovative school leaders face the additional challenge of finding teachers who believe in the school's particular approach and who have the skillset to implement it in the classroom. A leader from DeKalb Brilliance Academy said, "There are not a lot of project-based learning models [with a] career-connected focus for elementary school," which makes sourcing talent for "a school like ours . . . hard." Innovative schools can also suffer when longtime teachers leave: a principal from Juab High School said that the school had made "innovative strides" before the pandemic, "but those got wiped away very quickly when you lost a lot of practitioners that were able to articulate the value of the innovations, and they were replaced with people who . . . couldn't articulate it."

Some Canopy schools are working on solutions to these staffing issues. In 2024, 65% of schools reported that they used some form of flexible or alternative staffing model. For example, CART brings in industry professionals to work alongside teachers. Valor Preparatory Academy solved its need for a new math teacher by hiring an in-person learning coach and partnering with a third party to bring in a virtual (streaming) math teacher. Several Canopy schools foster teacher collaboration, using staffing models such as Opportunity Culture, which provides mentorship, opportunities for small-group teaching, and professional development.

Another strategy involves boosting teachers' job satisfaction by involving them in school leadership and decision-making: at CICS West Belden, a charter school in Chicago that serves over 530 elementary and middle school students, teachers are encouraged to voice their opinions on school policy and design decisions at both the school and charter network levels, and to initiate and pilot new ideas in their classrooms. "I see them wanting to stay here in the building. I see them wanting to grow in their professional career with Distinctive Schools," said CICS West Belden principal Kristin Eng. More than 95% of her teachers are returning for the next school year. Cultivating teacher agency may be a key part of an effective retention strategy.

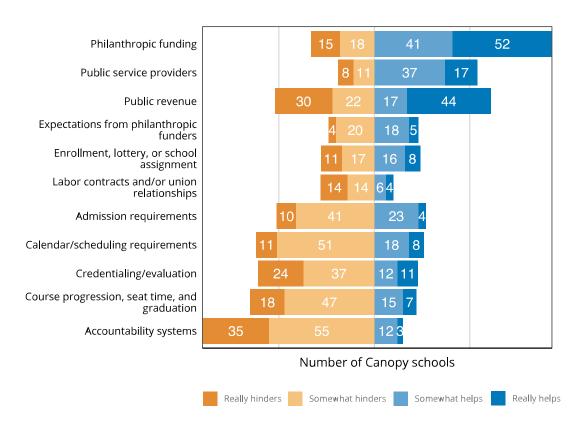
However, among schools not already implementing flexible and alternative staffing models, their appetite for adopting these models appears far from voracious: only five schools picked that practice as one they hope to pilot in the next five years. It may seem like a mismatch given that so many schools are concerned about staffing issues, but relatively few indicate current efforts to innovate around them. Future Canopy surveys can dig into this tension further, but this is a case in which systemic problems—like teacher workforce issues—need structural, not just local, solutions to relieve pressure on schools.

Canopy schools' biggest policy hurdles are accountability, graduation requirements, teacher credentialing, and scheduling

Policy factors can be either threats to or enablers of innovative schools' sustainability. To understand how schools are affected by policy factors, we asked leaders to report on whether certain factors helped their work or hindered it. (Leaders could also indicate that a factor "both helps and hinders" or has no effect on their work, but the chart below excludes those responses to highlight the disparities between policy factors that help or hinder the most.)

Figure 19: How Existing Policies and Ecosystem Factors Affect Canopy Schools' Work

Sample limited to schoools that participated in 2024 Canopy survey (N = 189).



In 2024, accountability systems were the policy issue that Canopy leaders cited most often as a hindrance (and least often as helpful) to their work. Graduation and seat time requirements, teacher credentialing and evaluation, and calendar and scheduling requirements followed close behind accountability as key hindrances. This is consistent with past surveys: In 2021, we found that graduation, calendar, and teacher credentialing requirements were among the most important policy issues for innovative schools, and in 2022, Canopy respondents cited these accountability and graduation requirements (along with funding) most often as the policy factors that they wanted to change.

Previous Canopy research sheds light on why Canopy school leaders feel hindered by these policies. Based on Canopy leaders' responses to an open-ended survey question, we noted in our <u>2022 report</u> that accountability systems too narrowly define student success, limiting curriculum flexibility and undervaluing Canopy schools' nonacademic outcomes. Leaders also said that graduation and seat-time requirements constrain flexible use of instructional time and fail to recognize out-of-school learning, such as internships and service learning. Traditional teacher credentialing creates barriers for many aspiring educators—such as community workers and industry experts—by offering no viable path to certification. Additionally, district and state policies, including testing schedules, class size caps, and time allocation rules, often restrict schools' ability to innovate with calendars and daily schedules.

However, it's not clear from survey responses alone if the policy barriers Canopy schools experience are threats to their schools' operations and success, or annoyances that they find ways to work around. Many states are continuing to enact legislation friendly to student-centered, equitable school designs, and their effects on practitioners may take time to be felt. In particular, the impact of accountability systems on innovation deserves further attention and research, especially given evolutions in accountability policies and state testing requirements in recent years.

The bottom line, based on what we can glean from Canopy leaders' responses, is simply that approaches like those used in Canopy schools will be more difficult for other schools to adopt without significant changes to policy. And in some of our interviews, Canopy school leaders argued that now is a particularly important time for policy action. "I think education is about to have a do or die moment," said Janel Harris-Hamiel, principal at Aggie Academy, an elementary school at North Carolina Agricultural and Technical State University in Greensboro, North Carolina. A strong proponent of public education, Harris-Hamiel nevertheless believes the sector needs to demonstrate a stronger ability to deliver on its promises to improve students' and families' opportunities. "It's time for education to be more innovative in policies as well as practices to move us forward."

Lack of tools, capacity, and time prevent broader adoption of new assessments

Remaking accountability systems and seat time requirements both imply changes to assessment. Accountability systems could more effectively reflect schools' performance if assessments of learning were better aligned with the student outcomes that communities want to see schools produce. And seat time and graduation requirements could become more flexible if students were assessed based on their mastery of key competencies, not their ability to receive a passing grade in a course with a certain number of credit hours. The Canopy project has increasingly sought to uncover how innovative schools are approaching assessment, and to share evidence of the student outcomes they produce.

A report we <u>published</u> last year found that schools are prioritizing a far wider range of student outcomes than traditional assessments capture, but fewer schools can comprehensively assess and produce evidence of those nontraditional outcomes.

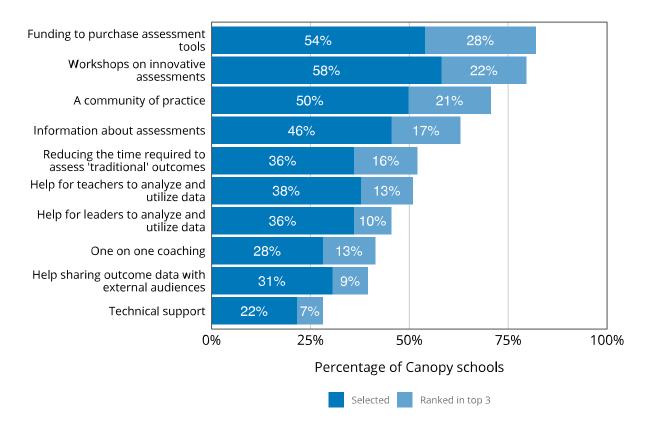
The 2024 Canopy survey provided further evidence for this conclusion. Over two-thirds of Canopy schools reported assessing students' deeper learning outcomes, such as communication and critical thinking, as well as social and emotional learning outcomes. Smaller, but still notable, proportions of schools reported using assessments for college and career readiness (44%) and agency and self-directed learning (38%). However, most of the evidence that schools shared for these nontraditional student outcomes was anecdotal, circumstantial, or limited in a way that made it difficult to know if schools were producing positive outcomes for all students.

What might help schools better measure unconventional student outcomes? We found that most school leaders requested better access to new assessment tools (information about them and funding to purchase them) and capacity-building opportunities (communities of practice and workshops on innovative assessment). Additionally, the fifth-most-requested support was changes to policy that

reduce the time needed for traditional assessments, suggesting that some schools feel they're being asked to spend significant time on assessment but not on assessing the full breadth of outcomes they care about.

Figure 20: Type of Support Canopy School Leaders Need to Measure "Nontraditional" Outcomes

Sample limited to Canopy schools participating in 2024 Canopy survey (N = 189).



We also saw evidence to suggest that the market for innovative assessment tools—one of the kinds of support schools say they most need—is still emerging. One survey question asked leaders to report if they are using, or had heard of, a range of assessment tools designed to capture the unconventional outcomes Canopy schools prioritize. The two tools with the most usage and awareness were the Panorama Student Survey and the Mastery Transcript; the Leaps Student Survey by Transcend was third-best known by leaders, and used about as much as YouScience, the career guidance tool. But overall, only about half of the leaders responding to this question reported that they "systematically" use any of these tools.

Meanwhile, we learned last year that most schools are designing assessments themselves. Taken together, this would suggest that schools have a strong desire for assessments that measure unconventional outcomes, but they're either not finding or not adopting tools from external providers. Assessment tool providers and schools may need more help to find each other and effectively match the tools to the use cases that schools have for them.

Part 4: Conclusion and recommendations

The Canopy project set out in 2019 to understand how K-12 schools are innovating. Five years later, our research has shown that schools are developing promising solutions to urgent needs ranging from absenteeism to career pathways. The changes they're making over time build on what they were doing before, and many leaders' beliefs in the need for their schools' unconventional approaches have strengthened. As a result, while the environment around Canopy schools has changed enormously since the pandemic, schools' theories of change about how to deliver better experiences and outcomes for young people have not.

These findings underscore that innovation at the school level—not just in education technology, policy, or central office operations—is a key lever for shifting students' experiences to be more engaging, flexible, empowering. Canopy schools help illustrate what new designs can look like in a wide range of communities. They also show that adequate freedom of action at the school level can enable educators to design and adopt solutions that make sense for their unique contexts. Such bright spots are sorely needed in a moment that demands not just academic recovery from the pandemic, but a transition away from a fundamentally inequitable and one-size-fits-all model for schooling.

However, innovative schools' foundations may be fragile: many leaders are concerned about resources and struggle to demonstrate strong evidence of the student outcomes they prioritize. Launching new or redesigned schools is necessary, but not sufficient, for durable and systemic change.

A call to action: Strengthening the conditions for innovation in schools

Nearly five years after the pandemic struck, it's time for historic investments to strengthen the conditions that foster innovation in schools. As our former CRPE colleague and Canopy advisor Betheny Gross once said, scaling innovations—in terms of specific solutions—must be paired with strategies to support

innovation at scale. That means that rolling out large-scale tutoring initiatives or investing in education technology companies can only go so far. Our nation's schools and school systems need help to design, share, adapt, and adopt the kinds of solutions that respond to their unique contexts. Specifically, policymakers, funders, and researchers should make commitments to:



Nurture and document the emergence of new designs from the grassroots

- Invest start-up funding for school-level **innovation:** Policymakers and funders should create opportunities for school founders and design teams to launch new schools or redesign existing ones. For example, NewSchools Venture Fund, the Barr Foundation, 4.0 Schools, and the Yass Prize currently invest in new and redesigned schools. States can also design funding opportunities to encourage innovation: for example, Indiana's NextGen School Improvement Grant offers schools up to \$3 million and puts a stake in the ground around school transformation, not just traditional school improvement. New sources of start-up funding may be especially critical as some major philanthropic funders have shifted away from supporting new school designs. Proposed federal legislation such as the NEED Act and Developing and Advancing Innovative Learning Models Act provide examples of what funding for innovation could look like at a national level.
- build capacity to take advantage of them: Policymakers and advocates should collaborate to design and pass legislation that encourages alternative approaches to schooling. Education Savings Account legislation sweeping across a number of states, when designed well, is a way to encourage innovation especially among private operators. But public schools remain a critical and underrecognized venue for new learning models, so states should design policies that incentivize innovation in public

districts and charters. For instance, Indiana is currently redesigning its graduation requirements to encourage schools to better prepare students for career pathways, and South Carolina is building districts' capacities to design personalized learning environments that take advantage of policy flexibilities. Organizations like KnowledgeWorks, Aurora Institute, and ExcelinEd have published robust guides for state-level policy to unlock student-centered learning.

- Power innovative teacher pipelines:

 Policymakers and funders should invest in both strengthening existing teacher pipelines, as well as creating new pipelines for teachers who face barriers to entering the profession. For instance, High Tech High's Graduate School of Education is minting new teachers with skills for facilitating rigorous project-based learning. And initiatives like CommunityShare are harnessing community educators and partners to work alongside teachers and bring alternative perspectives and expertise.
- Document emerging practice: Researchers and school designers should partner to describe new or understudied approaches used in innovative schools. For example, there is a critical need for updated research on how schools are using technology, including emerging uses of Al and evolving approaches to blended, hybrid, and virtual learning. Research can also help illuminate effective approaches for partnering and coleading with families.
- Build evidence for how established innovative schools are affecting students, families and communities
- Recognize and measure unconventional outcomes: Districts, states, and charter authorizers should take into account a broader range of student outcomes, especially when evaluating progress in innovative schools. For example, NewSchools Venture Fund's Expanded Definition of Success has shown the value of measuring alternative outcomes among its grantee schools, including how indicators like connection, engagement, and safety impact academic success.

- **Design new assessments:** Funders and policymakers should invest in the development of innovative assessments that draw on cutting-edge research and technology. States should take advantage of <u>new federal rules</u> making it easier to pilot innovative assessments, as Hawaii, Louisiana, Massachusetts, and other states are doing. Schools also need better access to tools that measure the quality of students' learning experiences, like Transcend's Leaps Student Voice survey does, as well as tools that assess students' progress in domains like deeper learning and SEL. Finally, schools need infrastructure to easily share anonymized student outcome data with the public.
- Strengthen data systems across silos: State and district leaders must help data systems bridge the gaps between early education, K-12, higher education, and workforce data to show student outcomes across time and institutions. For instance, California's Cradle to Career state data system is harnessing.data.from.across.agencies to illuminate not only how students fare on narrow academic indicators, but also what kinds of educational and workforce pathways lead to higher wages.
- Spread effective approaches in sustainable, systemic ways
- Support sustainable revenue strategies: Policymakers and funders should work with innovative schools to understand their long-term funding needs. This involves codeveloping sustainable revenue models and designing policies that ensure sufficient, predictable resources to support enduring impact. Efforts could include helping school and program operators qualify for familydirected funding in states with Education Savings Accounts, creating budget policies that allow districts and schools more autonomy in how they allocate funding, advocating for more equitable funding formulas like the one in newly passed legislation for student-based funding in Colorado, and accelerating creative uses of All that extend the capacity of teachers and staff or solve for human capital shortages.

- Offer "models" as starting points: Funders, policymakers, and state leaders should help schools adopt or adapt existing innovative approaches to teaching and learning. Schools don't all need to design original solutions from scratch, and research has found that tight resources can be wasted, and teachers' energy exhausted, by trying to reinvent the wheel. Once schools are clear on the problem to be solved, they should be able to tap into existing vetted sources of "models" for new learning designs, such as Transcend's Innovative Models Exchange, to get a head start on a solution with proven past success. Funders should also help successful schools document and codify their models for sharing and open new locations where opportunities arise.
- Align central office strategy: Funders, policymakers, and state leaders should encourage district and charter central offices to embrace innovation in mainstream public schools, and strengthen their own capacity for supporting those schools. For instance, CRPE and Walton Family Foundation are supporting three districts as they pilot and scale bold, innovative solutions backed by explicit central office champions. Networks of districts in Arizona and North Dakota are working to create <u>system-level conditions</u> for the growth of personalized learning, supported by KnowledgeWorks. Imagine Network is working to strengthen chief innovation officers' capacities to steward innovation in districts. And in New England, the Barr Foundation is supporting district and school teams as they seek to transform the high school experience.

It's not the first time that research has surfaced the need for action by policymakers, funders, and researchers to strengthen the conditions for innovation. But over five years since the launch of the Canopy project's national scan, and nearly five years since the pandemic struck, the need is clearer than ever.

Five years from now, at Canopy's ten-year mark, we could be telling a very different story: one in which school-level innovation is flourishing thanks to targeted, strategic investments that built the conditions for that innovation to emerge, demonstrate results, and spread. If successful, the evidence for these changes will be found not just in legislative memos, research papers, and grant competitions, but in the places where it matters most: young people's experiences in more equitable, student-centered schools.



Acknowledgments

A team of researchers and editors contributed to this report. The authors would like to thank Sarah McCann who made important contributions to every step of the process. Anwesha Guha, Gregor Thomas, and Shamaa Lakshmanan made important contributions to analysis and interpretation. Amber Cross, Youssef Shoukry, Heather Casimere, and Steven Weiner supported data collection. Merly Klass, PhD, made important contributions to the creation of the longitudinal dataset. Melissa Fall provided valuable developmental editing support and Alan Bradshaw provided copy editing. Emily Prymula led communications strategy and Michelle Afentoulis led design. Robin Lake, David Nitkin, Cynthia Leck, and Saya Reed gave valuable feedback on drafts of this report.

We also extend our sincere gratitude to reviewers Rebecca E. Wolfe, PhD, and Patrick Sims, whose thoughtful feedback and insights greatly enriched this report. Their expertise and careful review helped ensure the clarity, accuracy, and relevance of our findings.

We wish to extend a special thank you to the school leaders who provided valuable insights into their school designs through our series of follow-up interviews and, more importantly, for all the work they do to create enriching experiences for the students who walk through their doors.

The Canopy project is a collaborative effort made possible by the contributions of hundreds of nominating organizations and learning environments. Project advisors are Alexa Sorden (Leaders of Excellence, Advocacy and Discovery), Caroline Hill (228 Accelerator), Dereck Norville-Bowie (KnowledgeWorks), Donnell Cannon (Maureen Joy Charter School), Jin-Soo Huh (The Learning Accelerator), Manny Gonzalez (Beloved Community), Miguel Gonzalez (Sussex School), Nate Kellogg (The Learning Accelerator), Thomas Arnett (Christensen Institute), and Tyler Thigpen (The Forest School and Institute for Self-Directed Learning). These individuals have provided invaluable advice and pushed our thinking, many of them for years since the launch of the project.

The Canopy project is supported by the Barr Foundation, Carnegie Corporation of New York, and Overdeck Family Foundation. It is stewarded by the Center on Reinventing Public Education (part of Mary Lou Fulton Teachers College at Arizona State University) and Transcend.



Appendix: Canopy project methodology and analytic approach

The Canopy project, a collaborative effort to build collective knowledge about school-level innovation, was originally launched by the Christensen Institute in 2019 with support from the Barr Foundation, Carnegie Corporation of New York, Nellie Mae Education Foundation, and Overdeck Family Foundation. Now, Canopy is collaboratively led by the Center on Reinventing Public Education and Transcend, with input from a diverse group of advisors.

The project aims to surface and share knowledge about where, how, and why K-12 schools are "innovating," with a focus especially on more student-centered, equitable approaches that deviate from conventional assumptions about what school must be. To do this, the project recruits nominations from organizations nationwide, then asks leaders from the nominated learning environments to share why and how they're innovating (see sidebar).

HOW THE CANOPY PROJECT WORKS

Step 1: We <u>invite</u> a diverse set of education organizations across the country to nominate learning environments that are innovating at a school-wide level toward greater equity and student-centered learning. We define "learning environment" as schools and alternatives to traditional schooling that provide core, not just supplemental, educational experiences.

Step 2: We ask leaders from the nominated schools to complete a <u>school design survey</u>, in which they share information about how and why they're reimagining the school experience, as well as about their schools' demographics and context.

Step 3: We publish data online at www.CanopySchools.org in an interactive portal.

Read more detail about Canopy methodology here.

This report marks the fifth anniversary of the Canopy project. In prior years, Canopy has published an annual report summarizing key findings from that year's school leader survey. This year, for the first time, we are taking stock of what we've learned since the project launched in 2019. To do this, we conducted a longitudinal analysis on five years of survey data to determine what, if anything, has changed in schools.

Since 2019, Canopy has fielded five surveys to school leaders whose learning environments were nominated each year (see table). The first survey was fielded in the early spring of 2019, representing what schools were implementing in SY2018-19. There was no survey for SY2019-20, when the pandemic struck in the spring. The following year, Canopy fielded three surveys at different points of the school year, but for the purposes of this report, we have collapsed these responses into a single group of responses to represent SY2020-217. Starting in SY2021-22, Canopy has fielded a single survey in the early spring of each school year. Since 2019, 263 learning environments have completed at least two Canopy surveys.

Spring 2019	173 schools responded	
Spring 2020	No survey	
Spring 2021	232 schools responded	263 schools completed at least two of the five
Spring 2022	161 schools responded	Canopy surveys
Spring 2023	251 schools responded	
Spring 2024	189 schools responded	

Many of the elements of Canopy surveys have remained consistent over time. Every survey asks school leaders to report what their schools are implementing consistently at a school-wide level (not just sporadically, or in some classrooms but not others). Leaders do this by selecting from a set list of "practices," 87 of which have been included on at least two Canopy surveys since 2019.

This report uses repeat school responses to analyze the extent to which schools have made changes to their implementations since 2019. Because we only looked at schools with 2+ years of survey responses, we can actually observe changes within individual schools, not just changes in our sample of schools each year. For example, "assessments for career readiness" is one of the practices that has been included on every Canopy survey so far. We can see that among 263 schools, 58 began to assess students' career readiness during the five-year period we studied, and 8 stopped assessing students' career readiness, resulting in a net change of 50 more schools assessing career readiness in 2024 than in 2019.

Self-reporting has important limitations. For this reason we interviewed a subset of school leaders to learn more about the practices they reported on surveys. These interviews provided a valuable check showing that over the study period, many schools have actually begun to implement new practices or ceased to implement preexisting ones. As a result, there is reason to believe that even with self-reporting limitations, Canopy surveys can reliably suggest how school practice is changing over time.

^{7.} Collapsing the three survey datasets from SY2020-21 is possible because each school that participated that year only responded once to the survey questions we're using in this report's analysis.

Data

This report draws on two main sources of information: five years of survey data and three rounds of interviews with school leaders. Together, these sources reveal both broad trends and more detailed explanations of changes in school practices over time.

Our quantitative data comes from annual surveys spanning five years, which allowed us to track changes in school characteristics and practices. To create a comprehensive dataset, we first reviewed each survey question used over the years to ensure consistency. This dataset included both timevarying information to help us observe changes over time, and fixed characteristics to help us compare across different types of schools.

For school characteristics like geographic location (urban, rural, or suburban), school level (elementary, middle, or high school), and governance model (traditional district, charter, or independent), we retained each school's most recent response, as these details tended to stay consistent year-to-year. For student demographics—like total enrollment and the percentages of students classified as English learners, students with disabilities, those eligible for free or reduced-price lunch, and students of color—we kept each school's response for every year to capture any shifts over time.

In terms of school practices, we included all practices from previous surveys but focused our analysis only on practices tracked over at least two years. For each practice, we retained annual data showing whether it was in use, if it was one of the school's top five key practices, and how long it had been in use.

The qualitative data comes from three series of interviews with school leaders from 39 Canopy schools. The first set of interviews, conducted in early spring 2024, focused on trying to understand what has changed in schools over the past five years and what school leaders expect will change next. The second and third rounds of interviews took place in summer and fall 2024. In the second round, we explored how school leaders are using innovative strategies to address systemic challenges like chronic absenteeism or youth mental health, and what results schools are seeing from their work. The third set of interviews centered on specific areas of interest, such as blended learning, educational justice, and promising uses of AI, and explored how and why schools are making changes in these areas. These second and third waves of interviews used less structured protocols than the first strand, in order to tailor follow-up questions aligned with what we knew about each school from Canopy surveys.

Interview Strand	Topic	Example Questions
1 (Spring 2024)	Changes in Canopy schools since 2019 and anticipated future changes	 When you think over the last five years, what are a few of the biggest changes that have happened in your school. What caused the changes? Think back to 2019. Since then, what are some of the biggest changes that you've seen in the overall education sector? When you think ahead to the next five years, what changes do you want to pursue actively in your school, and why?
2 (Summer 2024)	How Canopy schools are solving for systemic challenges, including chronic absenteeism, mental health concerns, and workforce issues	 What are the key elements of your school's approach that are designed to solve that problem? What results are you seeing from your work, especially related to solving this problem specifically?
3 (Summer/Fall 2024)	Canopy school trends with AI, blended learning, and educational justice and holistic student supports	 What do you see as the most promising use cases for Al in your school? What has changed in your blended learning practices (i.e., the way you do blended learning) over the last five years? What are some of the new practices you've begun implementing in recent years—specifically, practices that help advance educational justice and support students' holistic wellbeing?

Analytic Approach

Our findings in this report draw from a mix of numbers and stories, combining both quantitative and qualitative methods. We took an iterative approach, in which each step informed the next, allowing us to dig deeper as new insights emerged. Our work began in early 2024 with basic calculations—summing totals and finding averages—which gave us an initial picture of school trends. These early results helped us design targeted interview questions to explore emerging themes and confirm interesting patterns. In turn, the insights from these interviews pointed us to new questions that we tested with further data analysis.

For the quantitative analysis, we first looked at overall patterns using averages and percentages. To understand how trends vary between different students and types of schools, we then used models that let us explore the influence of characteristics like school size and student demographics. Specifically, we used logistic regression, linear regression, Poisson, and generalized additive models as appropriate for the given research question at hand. Alongside these models, we examined connections between different practices with methods like exploratory factor analysis and correlation.

On the qualitative side, we conducted short, semi-structured interviews with school leaders. Each interview was recorded and transcribed, giving us a rich collection of voices and experiences. In our first round of interviews, we asked leaders about the changes in their schools over time. Through thematic analysis, we identified common themes that captured their responses. In the second round, we used information from interview transcripts to write a series of short narrative "vignettes" highlighting how schools are addressing problems through their innovative designs. In the final round, we again used interview transcripts to write a series of vignettes focused on how some schools are innovating with AI, blended learning, and educational justice.

This blend of numbers and narratives allowed us to look beyond the data to understand the stories behind school changes, creating a fuller, more nuanced picture of what's happening in Canopy schools today.

Supplemental resource: Changes in school practices over time

Our <u>supplemental resources page</u> includes extended analyses and interactive visualizations to support the findings presented in this report.



