NOT A LOST YEAR:

K–12 innovation during 2020-21 and how to nurture it post-pandemic

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ACKNOWLEDGEMENTS

INTRODUCTION

Among the lessons to take away from COVID-19 in the K–12 sector, one is this: we can never again say that schools haven't changed in a hundred years.

In fact, that argument, often used to make an urgent case for school redesign, was never completely true. Schools have adapted, often in quiet ways, as society and culture evolve. But after a year in which all schools upended the status quo to support students' learning and wellbeing during a pandemic, the most vocal critics of outdated school systems must acknowledge that even the most conventional schools have displayed a previously unrecognized degree of tenacity, commitment, and adaptability.

That capacity for change is promising because events over the course of 2020 and 2021 have laid bare the limitations of our existing school systems to support every learner, especially those most marginalized, to fulfill their unique potential. Moving beyond that status quo will require ongoing change—and not just any kind of change, but change in service of more equitable, joyful, and rigorous learning environments. For that, schools will need innovation: a process to solve a problem with a clear goal, but no pre-existing path to reach it.

> ## Innovation:
>
> A process to solve a problem with a clear goal, but no pre-existing path to reach it.

At this critical juncture before a new school year, it's a perfect time to learn from innovations already underway in school communities, including shifts in school practice during 2020 and 2021. It's also a perfect time to examine the direction that schools' innovation work may take going forward, and what schools need to support that work.

The Canopy project offers unique insight into these themes at a time when concrete information about innovative school practice is remarkably scarce. Since 2019, the project has set out to build collective knowledge about innovation in individual schools—the "trees"—as well as the whole "forest" of schools that are innovating nationwide. Here's how it works (see Figure 1):

Figure 1. Canopy project data collection process

Step	Description
Step 1: Source nominators	Canopy project leads solicit suggestions for nominators, which are organizations that know schools well but are not schools themselves.
Step 2: Nominate schools	Nominating organizations submit information about schools on their radar that are innovating at a schoolwide level.
Step 3: Document school models	Using a consistent set of "tags," or keywords and phrases, nominated school leaders report information about the practices they are implementing schoolwide.
Step 4: Add contextual data	Canopy project leads access publicly available data from the National Center for Education Statistics (NCES) and merge it, where available, into the Canopy data from nominators and schools.

Since its founding, Canopy project leads (referenced using the informal "we" throughout this report) have conducted three rounds of crowdsourcing: one in March 2019 (representing the 2018-19 school year and led by the Christensen Institute), and one each in August 2020 and January 2021 (representing the 2020-21 school year and led by the Christensen Institute and Transcend). An additional school survey in April 2021 gathered feedback and experiences from the current set of Canopy schools, but did not update schools' Canopy data. In total, the dataset includes 483 schools; of those, 232 schools submitted updated data in the 2020-21 school year, and are featured in the project's interactive data portal at www.CanopySchools.org.[1]

This brief summarizes key findings from our most recent analysis of the Canopy dataset, with a focus on understanding current patterns in school innovation and changes to schools' practices during a year of upheaval. In sharing these findings, we aim to equip school system leaders, policymakers, intermediaries, and funders with ground-level insight into the efforts emerging and taking root in schools so they may act more strategically and effectively to support schools that are reimagining the status quo in K–12.

Where Canopy schools are innovating

Innovation is possible in any school in the country. Although the Canopy project's methodology is not designed to be nationally representative, the dataset generated through its crowdsourcing process suggests that schools are innovating in diverse communities and contexts, challenging certain preconceptions about which schools are leading innovation efforts.

For instance, although one common narrative about charter schools is that they naturally foster innovation, traditional district schools are strongly represented in the Canopy data.[2] In 2018-19, the published dataset featured nearly double the number of traditional district schools compared to charter schools (see Figure 2).[3]

It's worth noting that the number of district schools remained about the same in 2020-21, though the number of charter schools increased by about two thirds. While this jump in charter school participation is striking during a year that was uniquely challenging for public school leaders, it doesn't necessarily mean that charter schools were innovating more in 2020-21. A range of factors, including Canopy methodology that depends on the participation of nominators and schools, contributed to producing these numbers.

Figure 2. Number of Canopy schools by type, 2018-19 vs. 2020-21

School Year
- 2018–2019
- 2020–2021
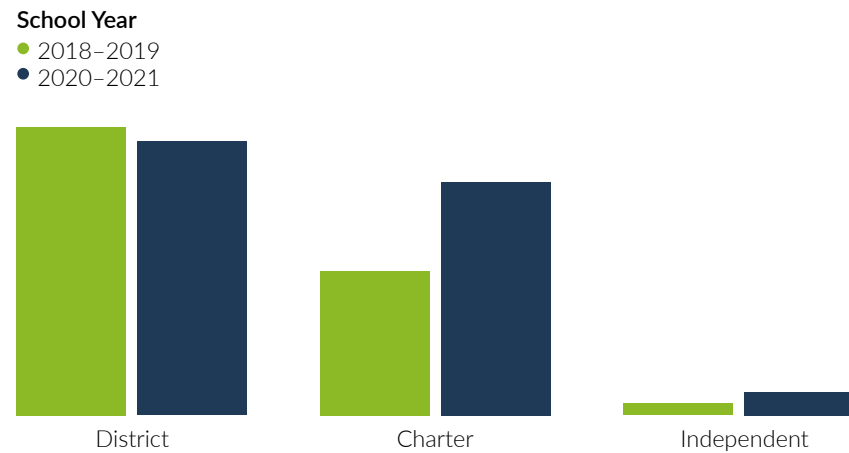
Overall, schools in the Canopy project appear to consistently represent a wide range of contexts and communities across the country. The proportions of urban, suburban, and rural schools, as well as student demographics in Canopy schools, have remained quite stable over all three rounds of data collection so far. Among schools participating in 2020-21, urban schools are more than twice as numerous as rural schools, and suburban schools are least common. In terms of demographics, Figure 3 shows the 2020-21 Canopy schools, each represented as a dot marking the proportion of students in each category: students eligible for Free and Reduced Price Lunch (FRPL), students with disabilities, students who are English Language Learners, and students of color (which we defined as non-White students).[4]

Figure 3. Distribution of student demographics in 2020-21 Canopy schools
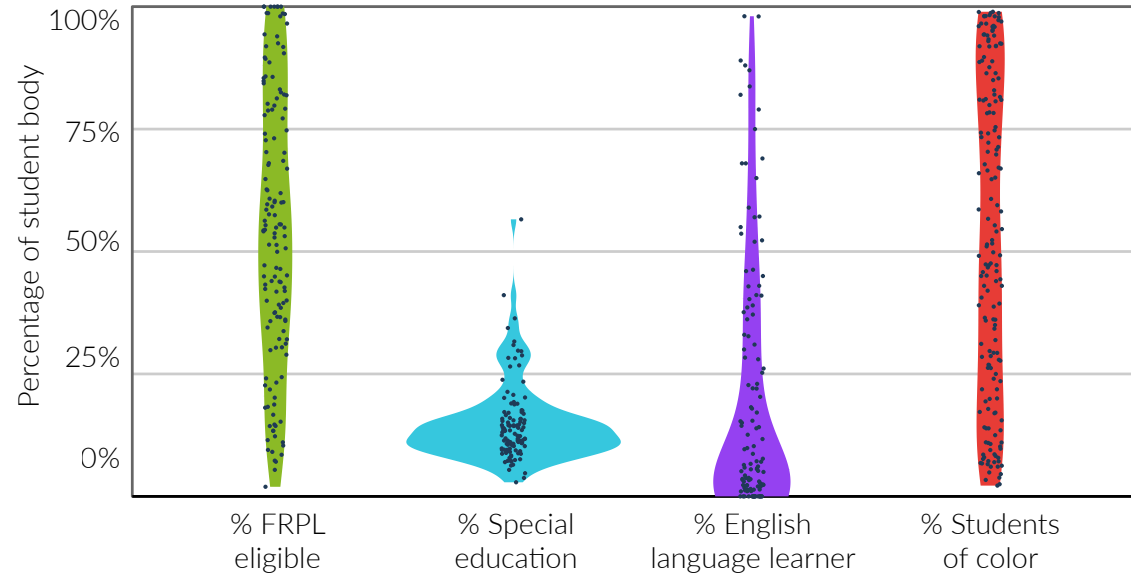
By the end of our 2020-21 crowdsourcing, nominators had identified schools in a total of 48 states and the District of Columbia (up from 37 states and DC by the end of our 2018-19 crowdsourcing).[5] Participating schools in 2020-21 represent 43 states and DC.

The project will continue to work towards surfacing innovation in schools in less represented geographies, like the Midwest, as well as in schools serving students with diverse needs and students who are historically marginalized.

EMERGING INSIGHTS IN SCHOOL INNOVATION

The Canopy project's wealth of data on school practices—documented using consistent "tags" in order to enable national analysis and comparisons—can reveal insights, both suspected and surprising, about the approaches innovative schools are pursuing.

Three questions guided our landscape analysis using tagging data this year:

1. How are schools' innovative practices changing over time, including new adoption of practices?

2. Where are schools implementing equity-focused approaches designed to improve experiences and outcomes for students experiencing poverty and students of color?

3. How are high schools reimagining the learning experience for adolescents?

The following subsections describe our findings related to these three questions, followed by key areas for further investigation.

New adoption: Changing practices over time

Key takeaways:

- Since 2018-19, schools adopted blended learning more than other practices.

- Many of schools' new "core" practices appeared responsive to events in 2020-21.

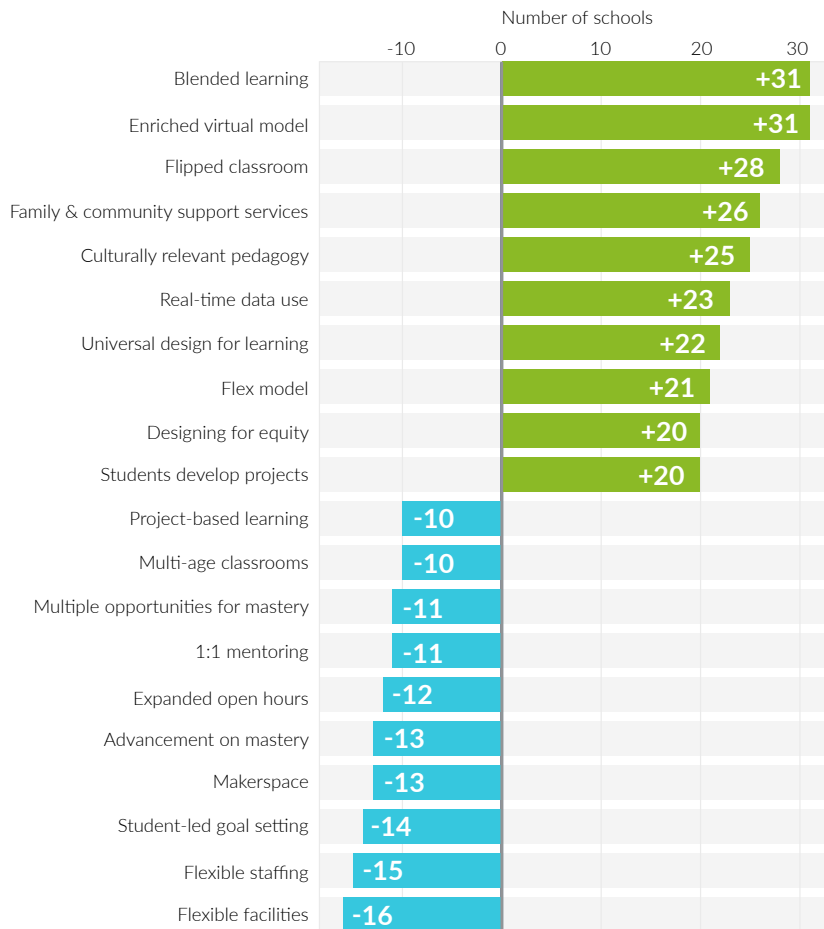- Schools experimented with a wide range of emerging practices during the past year.

During a school year characterized by variation in how schools faced up to the pandemic, and a nationwide reckoning with racism, education leaders, funders, and policymakers have often asked themselves: Apart from developing remote, hybrid, and safe in-person learning models during COVID-19, what—if anything—is actually changing in K–12 schools? Three Canopy project analyses shed light on this question.

The first type of analysis reveals trends in what kinds of practices are being adopted or retired. So far, the Canopy project has captured data from 86 schools that participated in both 2018-19 and 2020-21. As a result, in these schools, we can directly compare the practices that they began to implement, or stopped implementing, from one year to the next (see Figure 4). Overall, these schools added more practices than they removed.

One key takeaway is that several of the practices most often added in 2020-21 related to *blended learning* (the integration of online learning into brick-and-mortar schools). In fact, *blended learning* and *enriched virtual* (a specific model of blended learning in which students primarily learn online in a location outside of school, but attend school for required face-to-face learning sessions with a teacher) were added by over a third of schools from 2018-19 to 2020-21. *Flipped classroom* and *flex model*, two other models of blended learning, as well as *real-time data use*, an important tool for facilitating personalization in blended-learning classrooms, also appeared among the most-added practices.

Schools also often reported new implementations of *family and community support services*, *designing for equity*, and *practice of culturally relevant pedagogy*, three practices often discussed in light of equity and representation issues that have surged due to COVID-19 and the racial justice movement.

Figure 4. Practices most often added or removed from 2018-19 to 2020-21

Number of schools

| Practice	Value
Blended learning	+31
Enriched virtual model	+31
Flipped classroom	+28
Family & community support services	+26
Culturally relevant pedagogy	+25
Real-time data use	+23
Universal design for learning	+22
Flex model	+21
Designing for equity	+20
Students develop projects	+20
Project-based learning	-10
Multi-age classrooms	-10
Multiple opportunities for mastery	-11
1:1 mentoring	-11
Expanded open hours	-12
Advancement on mastery	-13
Makerspace	-13
Student-led goal setting	-14
Flexible staffing	-15
Flexible facilities	-16

The second type of analysis revealing recent changes in schools focuses on practices that schools report as "core," or central, to their models. On Canopy school surveys in 2020-21, after using tags to indicate all the practices being implemented at a schoolwide level, leaders could identify up to five of those tags as core practices. Leaders also reported how long

each of these core practices had been implemented at the school (see Figure 5, as well as an interactive graph of all 78 core practices here). Out of 91 total practices catalogued in the Canopy project, 78 of them were reported as core practices by at least one school leader.[6]

This data on core tags allows us to analyze patterns in the practices that schools see as central to their models.[7] The vast majority of schools' core practices tend to have longer histories of implementation, which makes sense because schools may be more likely to name core practices that are well-established.[8] In contrast, implementations of less than a year are fairly uncommon overall. But most compelling for analyzing innovation during the pandemic, this data also suggests which practices are both central to schools' models, and newly adopted.[9]

Figure 5. How long schools report implementing top 10 core practices
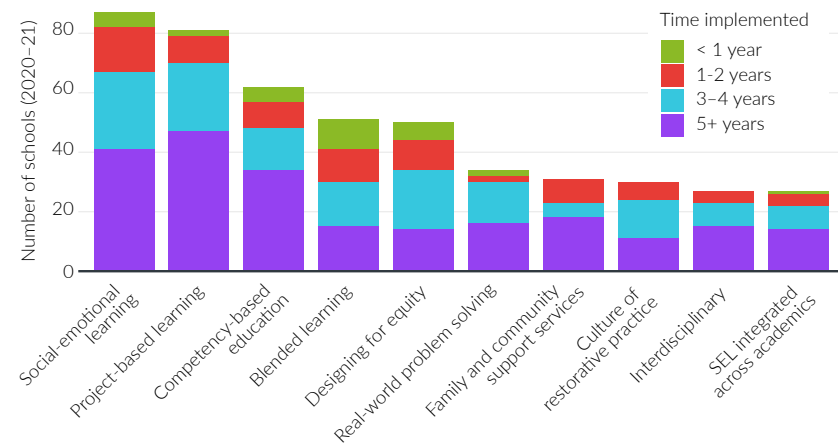
Our analysis revealed that *blended learning* was reported most often as a new core practice. Ten schools, or about 20% of those reporting *blended learning* as a core practice, reported developing the practice within the last year—which is to say, during the COVID-19 pandemic.[10] A number of schools also reported brand-new implementations of *asynchronous online learning* and *synchronous online learning* (eight schools), *culture of antiracist action* (six schools), *designing for equity* (six schools), *social-emotional learning*

(*SEL*; five schools), *competency-based education* (*CBE*; five schools), and *hybrid* (only five schools total reported this practice as core, and four of them reported it as less than a year old).

These findings suggest not only that certain practices are more recently adopted, but that some schools see those new practices as central to their work alongside other, more mature approaches. For example, Northside Elementary in Rogers, AK, reported implementing more mature implementations of *CBE* (5+ years) and *makerspace* (3-4 years), but less than a year of implementing *SEL*, as well as *assessments for SEL*. And DB EXCEL, a STEM-focused high school in Kingsport, TN, reported mature practices like *blended learning* (5+ years), *project-based learning* (3-4 years), *design thinking* (3-4 years), and *multiple ways to demonstrate mastery* (3-4 years), but reported implementing *CBE* for less than a year.

Finally, the Canopy project offers a third source of insight into emerging practices in schools. Since we suspected that many schools were experimenting with smaller-scale innovations this year, in January 2021, Canopy surveys included a new, open-response survey item that invited leaders to highlight promising practices that have emerged during COVID-19, even if those practices aren't part of their whole-school model.[11]

Of the 177 schools that responded to those January surveys, 60% described emerging innovations in their schools. (The remaining 40% of leaders either declined to share any changes or noted they hadn't made changes.) A loose categorization of those responses about emerging innovations revealed themes in practices such as:

- **Mastery-based learning** approaches that helped students, teachers, and families understand students' individual learning progress;

- **Staffing model changes**, such as creating community outreach positions for staff whose jobs depend on school buildings being open, or introducing team teaching and co-teaching;

- **Mental health support**, including wellness sessions and opportunities for students to have "real talk" about what's going on in the world;

- **Virtual enrichment opportunities**, including showcases, field days, and career days;

- **Family engagement and learning models** to support families taking on increased responsibilities for student learning at home; and

- **Hybrid and virtual school options** that some leaders predicted would continue beyond the pandemic, such as one leader of a brick-and-mortar school who launched a virtual charter this year to offer families a higher-quality virtual option than others on his radar.

Key questions raised by this analysis:

- Is blended learning on the rise, as suggested by Canopy data on core practices and changes in practice over time?

- To what extent do newer adoptions of core practices respond directly to issues that came up for schools during 2020 and 2021?

- What strategies can help schools protect and nurture the promising practices that emerged during 2020 and 2021?

Equity focus: Practices designed to support marginalized students

Key takeaways:

- Equity-focused practices appeared to be most prevalent among urban schools.

- Higher poverty schools were also associated with more equity-focused practices.

The pandemic's disproportionate impact on marginalized communities, increased attention to police violence, and public engagement with issues of racial justice have made educational equity an area of intense focus and investment these past couple of years. As a result, the Canopy project's documentation of school practices focused on equity can shed much-needed light on where those practices are—and are not—being adopted.

A number of tags in the Canopy dataset represent practices explicitly aimed at improving experiences and outcomes for students of color, students in poverty, and other historically marginalized groups. This analysis investigated whether implementation of these practices is associated with school factors like student demographics, level, governance model, or locale. Analysis focused on nine tags (among a total of 91) that represent overtly equity-focused practices.[12]

Among schools participating in 2020-21, the most commonly cited of these equity-focused practices were *designing for equity* (163 schools), *practice of culturally relevant pedagogy* (154 schools), and *culture of restorative practice* (153 schools). *Elimination of tracked classes* was least commonly cited (92 schools). On average, schools reported roughly half of the nine equity-focused practices. It was fairly uncommon to see schools reporting none of

these practices, and it was also fairly uncommon to see all nine practices reported. The vast majority of schools reported between two and eight equity-focused practices.

Among the contextual factors we analyzed using a statistical model, a school's locale—specifically, whether a school is located in a rural community or not—was the biggest predictor of equity-focused practices. On average, rural schools reported about two fewer equity-focused practices than their counterparts. No other contextual factor we examined (e.g., school level, governance model, and student demographics) even came close to locale in terms of its relationship to the number of equity-focused practices in schools. Figure 6 shows how the share of urban schools grows, and the share of rural schools shrinks, as the number of equity-focused practices increase.

Figure 6. Distribution of equity-focused practices by locale
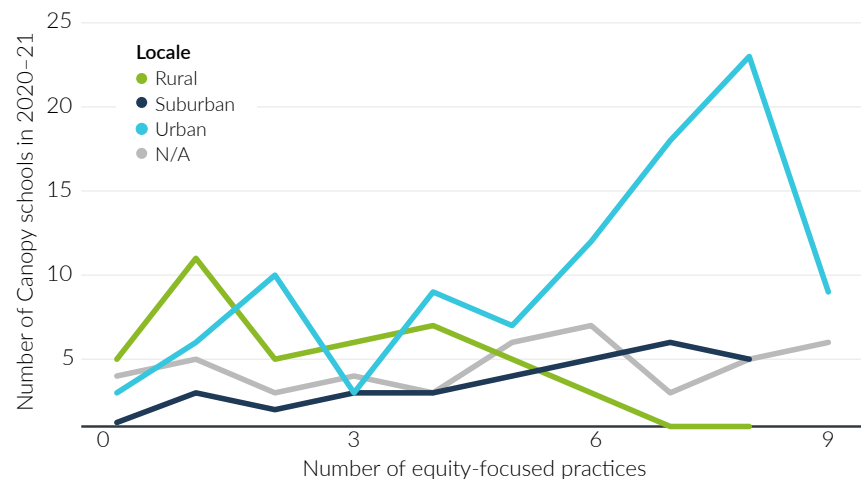
Compared to locale, student demographics were less strongly associated with whether schools report equity-focused practices, but some relationships emerged. For instance, schools with higher rates of Free and Reduced-Price Lunch (FRPL) eligibility, a proxy for poverty, were associated with more equity-focused practices.
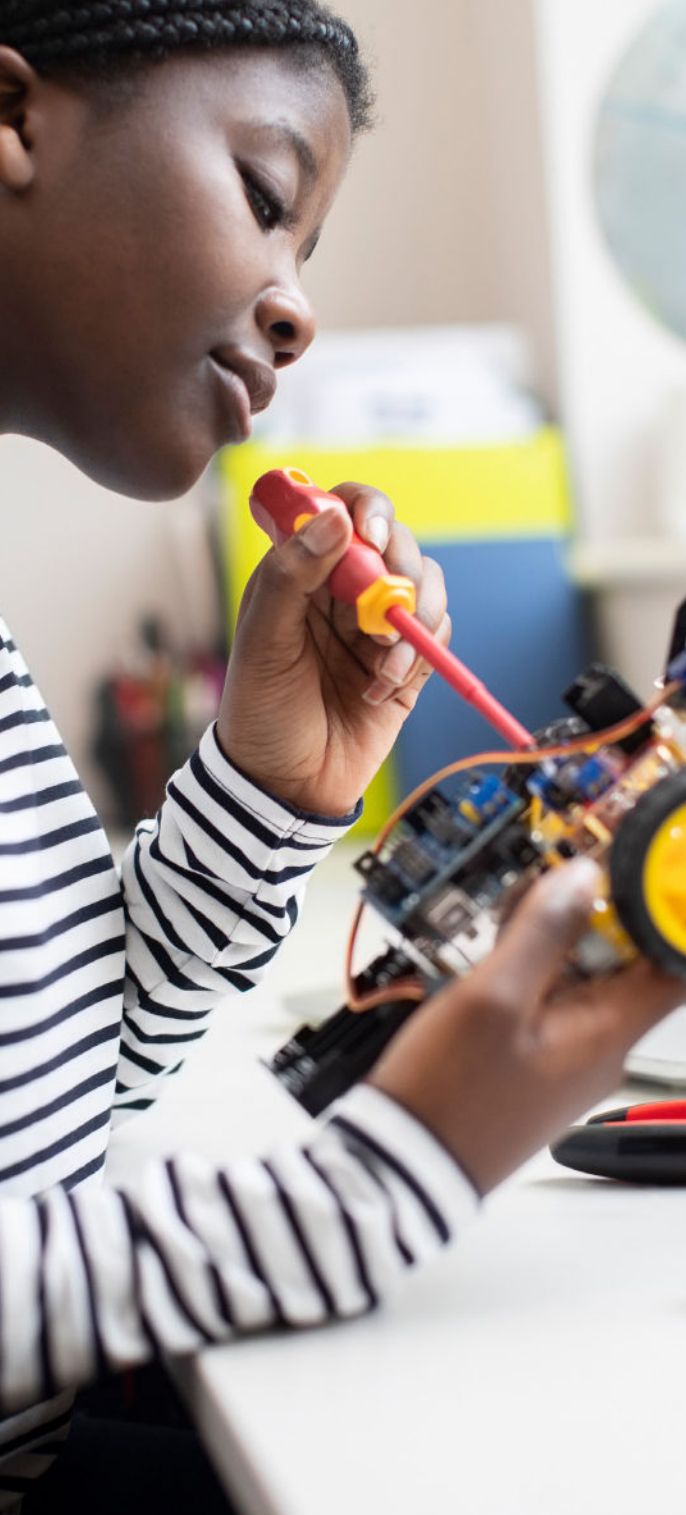
As for student race and ethnicity, these demographics were not strongly associated with the number of equity-centered practices in either urban or rural schools. But at suburban schools, higher proportions of students of color (especially higher proportions of students identified as Hispanic) were associated with more equity-centered practices. In turn, suburban schools with higher proportions of White students tended to report fewer equity-focused practices. In fact, a ten percentage point increase of White students in a suburban school was associated with an average decrease of 0.27 equity-focused practices.

No major effects related to Black student populations showed up in the analysis. That means that statistically, a school's proportion of Black students wasn't a strong predictor of whether the school reported equity-centered practices.

Of course, the Canopy project lacks data on the myriad other factors that would influence whether a school implements equity-focused practices. It's important to note that in the analysis, only about a third of the variance in the number of equity-focused practices could be attributed to schools' locale and demographics.

Key questions raised by this analysis:

- Are equity-focused practices less common in rural schools nationwide, as Canopy data suggests in innovative schools? If so, why?

- Especially given the increasing politicization of racial equity, what lessons can be learned from rural schools successfully implementing equity-focused practices, and how they are framing their approaches to their communities?

- What are the biggest drivers behind adopting equity-focused practices in urban and suburban schools? How do these differ from the drivers in rural schools?

High school innovation: Redesigning the adolescent experience

Key takeaways:

- College- and career-related practices appeared in high schools across many settings, and are also more common in high schools than in elementary and middle schools.

- Urban high schools were associated with several other types of practices, especially equity-focused practices.

Redesigning high school: it's been a popular idea for decades in education reform, with initiatives ranging from the Coalition of Essential Schools to the more recent XQ Super School project. The Canopy project suggests that interest in high school redesign remains strong, with high schools making up about half of the Canopy schools participating in 2020-21.[13] Our analysis of these schools revealed the innovative practices most common in high schools, as well as what types of practices tended to appear in high schools in different contexts, like schools with different demographics, size, and locale.

It turns out that many of the practices most commonly reported by high schools (compared to non-high schools) are intuitive, such as *dual credit* (when students can earn college credit while in high school) and *early college high school* (schools that are a hybrid of high school and college, where students take high school and college classes simultaneously). Some career-oriented practices, like *career training and prep* or *students earn industry credentials*, also appeared more frequently in high schools.

But it's worth noting that some practices that can be appropriate for learners of all ages were also more commonly reported by high schools. *Project-based learning* and *competency-based education*, typically discussed

as important phenomena across the K–12 spectrum, were actually reported more often in high schools. Additionally, while students of any age can benefit from meeting professionals from different fields, 45% of high schools reported that *students meet industry professionals* compared to 25% of non-high schools. And *community and business partnerships*, which can help schools of any level facilitate experiential and real-world learning, showed a 17-percentage-point difference between high schools and non-high schools (see Figure 7).

Figure 7. Practices more common in Canopy high schools
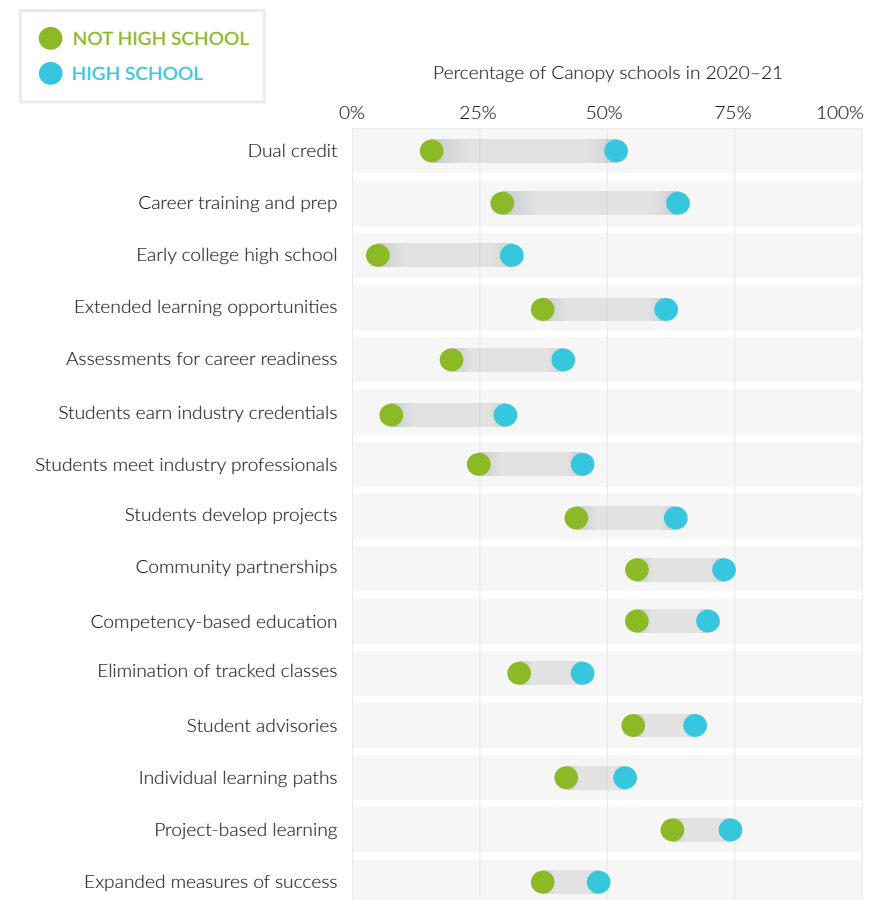
We also analyzed what types (or "clusters") of practices are associated with high schools with different total enrollment numbers, locales, and student demographics.[14]

One cluster of college-and-career themed practices, exemplified by tags like *students earn industry credentials*, *students meet industry professionals*, and *dual credit*, appeared to be distributed across high schools in a wide range of settings. This cluster of practices was not strongly associated with any of the factors we investigated (e.g., urban or rural schools, higher FRPL rates, or higher total enrollment). Many of the tags in this cluster are also those that appeared more commonly in high schools than other schools (see above).

Locale appeared to be associated with high schools' likelihood of reporting three other clusters of practices. First, urban high schools had a strong positive association with a cluster of equity-oriented practices, exemplified by tags like *social justice focus*, *hiring prioritizes equity-focused values*, *culture of anti-racist action*, and *practice of culturally relevant pedagogy*. (High schools serving higher proportions of students of color and students qualifying for Free and Reduced-Price Lunch were also more strongly associated with this equity-oriented cluster of practices.)

Urban high schools were also positively associated with a second cluster of practices themed around individualized and tech-enabled instructional models, exemplified by tags like *students progress at their own pace*, *individual rotation* (a model of blended learning), *individual learning paths*, and *interoperable data from multiple technologies*. The third cluster of practices positively associated with urban high schools was themed around deeper learning and inquiry-based instructional models, exemplified by tags like *performance assessment*, *project-based learning, real-world problem solving*, and *interdisciplinary*.

Rural high schools were negatively associated with the same three clusters of practices that appeared more commonly in urban high schools, especially the cluster of equity practices.[15] (This supports the finding, above, that locale was the strongest predictor of the presence of certain equity-focused practices across all schools in the dataset.)

We had hypothesized that school size might be another place where we'd see differences in practice, such as project-based learning practices appearing more commonly in smaller schools. But in this particular analysis, that hypothesis didn't bear fruit; school size wasn't strongly associated with any cluster of practices, except for a slight negative association between larger schools and equity practices.

Key questions raised by this analysis:

- What promising innovations are rural high schools developing that are tailored to their unique circumstances?

- Why might rural high schools be less likely to adopt innovative practices related to equity, individualized instruction, and deeper learning? Where rural schools are implementing these practices, why are they choosing to do so and to what degree are they achieving success?

- Why might elementary and middle schools be less likely to adopt innovative practices that, although they can benefit students at all levels, currently appear far more often in high schools?

THE MOTIVATIONS BEHIND SCHOOL INNOVATIONS

From the beginning, Canopy project advisors have noted that it's difficult to create meaning from the approaches schools are implementing without understanding why they are doing so. One method for revealing the reasons behind schools' approaches involved a new Canopy survey question, included on surveys in 2020-21, that asked schools to select all the conditions that led the school to adopt its current model. Most conditions on this fixed list were determined after analyzing themes from interviews with a subset of Canopy school leaders in 2019. After the onset of the pandemic, a condition called "School building closures due to COVID-19" was added, and the list also included an "Other" option. Figure 8 shows the proportion of Canopy schools in 2020-21 that cited each innovation catalyst.

Figure 8. Proportion of Canopy schools reporting each innovation catalyst, 2020-21
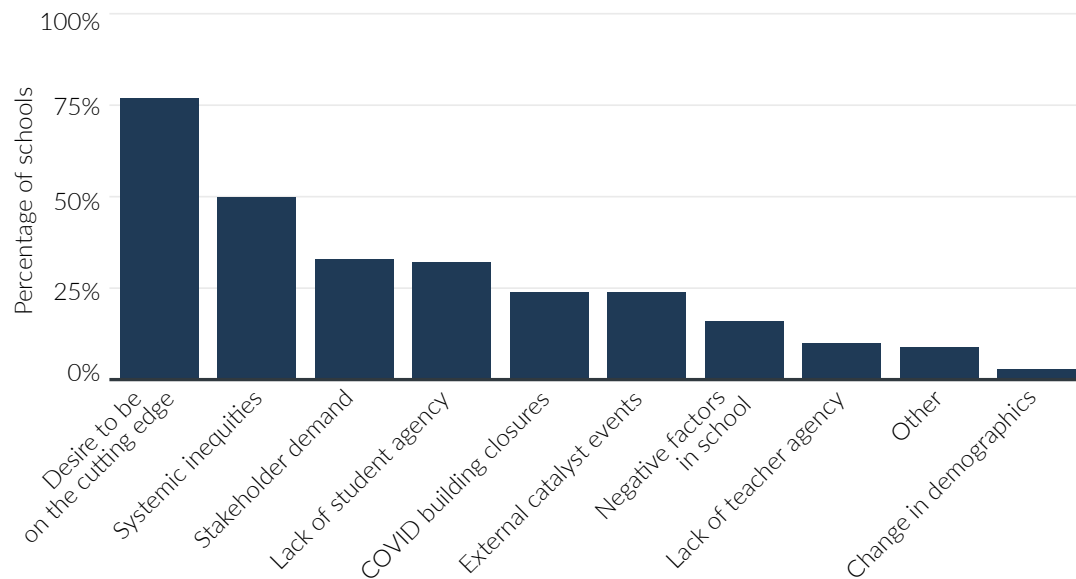
Of course, survey results like these can only offer limited information about the complex motivations behind the innovations schools pursue. To dig deeper, Canopy project leads conducted 45-minute interviews with 14 Canopy school leaders to learn what drove them to make significant changes that they were enthusiastic about—in other words, promising innovations in their minds—in the 2020-21 school year.[16] (We framed the interviews this way because we wanted to learn about the motivations behind potentially positive innovations, and avoid too much focus on unwanted changes, such as a rapid shift to emergency remote learning, that in some cases resulted in negative impacts.)

One of the major insights derived from interviews with school leaders in the Canopy is that although COVID-19 was a theme in leaders' experiences this year, the pandemic itself didn't change schools—people changed schools during the pandemic, and for a variety of reasons. Our analysis found a range of drivers that combined to both push leaders away from existing practices and pull them toward new ones. Drivers were categorized into three broad sets of motivations, though some school leaders described motivations in multiple categories.

1. The first set of motivations included school leaders who described adopting a change in order to **keep the school's core approach intact while riding out the pandemic**. The changes they made were less in service of doing something new, and more about sustaining their existing ways of doing things in new conditions. For example, one leader reported converting an in-person "Museum Night" tradition into a virtual event, and learning about some unexpected benefits of digital exhibitions of learning. Another leader described sustaining his school's core commitment to project-based learning, but reconfiguring schedules and community partnerships so that students could focus on only one project at a time, rather than two or three. Ultimately, the new approach both saved the school time, and drove deeper engagement in each project.

2. The second set of motivations included school leaders who developed new practices in order to **effectively address critical needs that came to light during 2020 and 2021**. These changes were notable departures from schools' normal ways of doing things, and were adopted because

of needs that either emerged or became more urgent. In interviews, one leader shared how her school initiated a "Community Care" model that enabled in-school custodial care for some students even while instruction remained fully virtual. Another leader described how the Black Lives Matter movement prompted her school to "walk the talk" about racial equity, leading to a distributed leadership model that involved all staff members in decision-making.

3. The third set of motivations included school leaders who adopted changes in order to **accomplish something they had always wanted to do, even before the pandemic**. These new practices had been attractive before 2020-21, but COVID-19 created circumstances that allowed leaders to seize the moment. For example, one leader noted how he'd always wanted to transition to standards-based grading, but hadn't prioritized it until parents realized that they couldn't effectively support their children's learning at home with abstract scores attached to each course unit. In part due to parents' needs and in part due to the school leader and staff's longtime interest, the school initiated a system that indicated students' progress in learning specific content and skills.

Key questions raised by this analysis:

*   How do schools' motivations for innovating impact the likelihood of those innovations persisting after the pandemic?

*   How might we better understand schools' interest in being on the cutting edge and demonstrating what's possible in K–12, given that most Canopy leaders reported this as a catalyst for innovating?

*   What reasons for innovating might prompt more schools to adopt innovative practices that improve students' experiences and outcomes?

WHAT INNOVATIVE SCHOOLS NEED TO SUCCEED

In April 2021, rather than solicit updates on schools' approaches that could soon go out-of-date with the end of the school year, Canopy leads distributed a short survey intended to gather school leaders' perspectives on the factors that enable innovation in their schools.

Key takeaways:

- Public and private funds appeared extremely important for schools that are innovating.

- Innovative school leaders reported highly valuing communities of practice with their peers.

One key question asked leaders to reflect on a fixed list of policy and regulatory factors that may impact their abilities to innovate.[17] The most notable result was that over half of the 106 respondents reported that the availability of public revenue is "extremely important" for their innovation work (see Figure 9). On average, availability of philanthropic funding was the next most important factor, suggesting that schools depend heavily on both public and private dollars to enable their student-centered models.

Many school leaders also reported that structures and systems like course progressions, seat time, graduation requirements, scheduling, and calendars were important to the success of their innovation work. On the other hand, the least important factors, on average, were enrollment, lottery, or school assignment systems; and labor contracts.
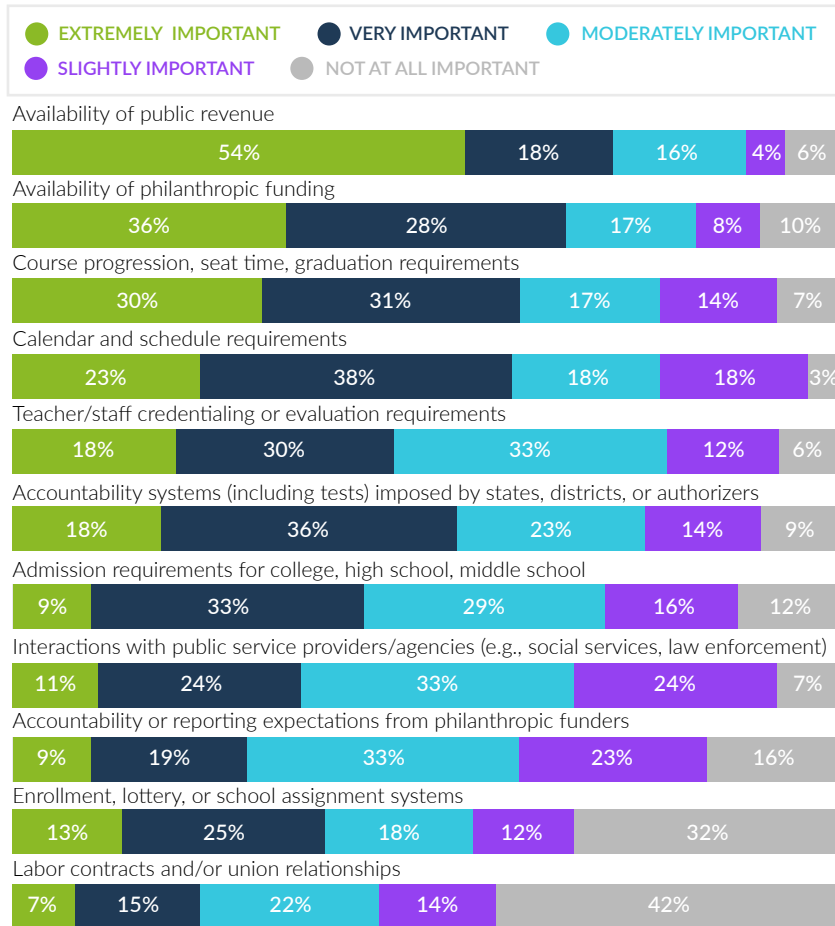
> Structures and systems like course progressions, seat time, graduation requirements, scheduling, and calendars were important to the success of school leaders' innovation work.

Figure 9. Policy and regulatory factors impacting innovation in schools

Legend:
- EXTREMELY IMPORTANT
- VERY IMPORTANT
- MODERATELY IMPORTANT
- SLIGHTLY IMPORTANT
- NOT AT ALL IMPORTANT

Factor	Extremely Important	Very Important	Moderately Important	Slightly Important	Not at all Important
Availability of public revenue	54%	18%	16%	4%	6%
Availability of philanthropic funding	36%	28%	17%	8%	10%
Course progression, seat time, graduation requirements	30%	31%	17%	14%	7%
Calendar and schedule requirements	23%	38%	18%	18%	3%
Teacher/staff credentialing or evaluation requirements	18%	30%	33%	12%	6%
Accountability systems (including tests) imposed by states, districts, or authorizers	18%	36%	23%	14%	9%
Admission requirements for college, high school, middle school	9%	33%	29%	16%	12%
Interactions with public service providers/agencies (e.g., social services, law enforcement)	11%	24%	33%	24%	7%
Accountability or reporting expectations from philanthropic funders	9%	19%	33%	23%	16%
Enrollment, lottery, or school assignment systems	13%	25%	18%	12%	32%
Labor contracts and/or union relationships	7%	15%	22%	14%	42%

The same survey asked leaders to reflect on the potential benefits of the Canopy project that they valued most, which was telling of the factors that support innovation. Responses revealed that being part of communities of practice with peers is highly valued by leaders pursuing innovation. Likewise, recognition for their schools and visibility into the innovations other schools are pursuing appear to be benefits that leaders desire. Resources related to innovative approaches were valued by many leaders as well, but not as highly on average as other factors.

Key questions raised by this analysis:

- If the availability of funding is most critical for schools that are innovating, how might American Rescue Plan funding be leveraged to maximize its impact on schools intent on reimagining the status quo post-pandemic?

- How can intermediary organizations, state agencies, and funders support schools' equitable access to meaningful communities of practice among their peers?

CONCLUSION

Our research through the Canopy project this year strongly suggests that there's hope for the growth of student-centered learning models in the wake of the pandemic. But innovation must be nurtured and cultivated, not simply rolled out. And doing so requires learning first from the efforts already underway in school communities.

As a result, education leaders, policymakers, and funders can take away valuable insights from the Canopy analysis, which reveals patterns in schools' newly-adopted practices, their implementation of equity-focused approaches, and their efforts to reimagine high school. Equally important, they can use this data to tailor their activities to nurture the evolution of these practices, improving schools' abilities to impact students' experiences and outcomes.

To further enhance education leaders', policymakers', and funders' own understanding of innovative school practice and how to support it in 2021 and beyond, we also offer the following actions that can be taken immediately:

1. **Explore the Canopy data:** Using the interactive Canopy data portal, filter and sort to discover schools in particular geographies, with specific demographic profiles, or undertaking various practices. Or, navigate straight to a school's profile to learn about their model.

2. **Share your insights:** As you reflect on the findings from the Canopy project this year, post your reactions and questions on social media using #CanopyProject, @TranscendBuilds, and @ChristensenInst, or share them with your colleagues to spark new conversations.

3. **Join a peer community:** As a leading partner in the Canopy project, Transcend is inviting practitioners and leaders to its open community focused on school design. Join the Transcend Design Community to connect with peers, including many of the participating Canopy school leaders.

NOTES

1. Throughout this report, we note which set of schools—either the 2018-19 set of 173, or the 2020-21 set of 232—are included in figures and analysis. Where analysis involves publicly reported data, the total number of schools included may be lower due to lack of available data from the National Center for Education Statistics. (Currently, about 20% of Canopy schools lack this data.)

2. For an example of this common narrative, see Chester Finn Jr., Bruno V. Manno, and Brandon Wright, "The Purpose of Charter Schools," *U.S. News & World Report*, May 8, 2017, https://www.usnews.com/opinion/knowledge-bank/articles/2017-05-08/how-charter-schools-improve-traditional-district-education.

3. The large proportion of traditional district schools in the 2019 dataset led the Canopy project to be featured in an *Education Week* op-ed: Jenny Curtin, Britt Neuhaus, and Saskia Levy Thompson, "Stop Ignoring the Innovation That Happens in Traditional Public Schools," *Education Week*, November 27, 2019, https://www.edweek.org/education-industry/opinion-stop-ignoring-the-innovation-that-happens-in-traditional-public-schools/2019/11.

4. Student demographic data is from the following sources: EdFacts 2017-19 and CCD 2017-18. As a result, this demographic data lags behind the 2018-19 and 2020-21 Canopy data. Student demographics in schools may have changed from when this public data was collected to when Canopy data was sourced. Additionally, using these demographic data categories for analysis related to poverty level and racial/ethnic identity is limited. For example, FRPL eligibility is an imperfect proxy for poverty, and data on race and ethnicity of the student body does not communicate to what extent student demographics reflect the demographics of districts and communities. Lastly, we have opted to use the same terminology and capitalization as reported by the National Center for Education Statistics (American Indian/Alaska Native, Asian, Black, Hispanic, Native Hawaiian/Pacific Islander, White, and Two or More Races), while acknowledging that these are the terms used in public data to identify students, not necessarily the terms that students themselves prefer.

5. The two states remaining without any Canopy nominations are Nebraska and North Dakota.

6. That "long tail" of core practices means that schools challenging the status quo use a wide range of terms to describe their core commitments, which in turn suggests that there's wide variation in the kinds of innovative school models out there. As a case in point, some infrequently-cited core practices can offer helpful insight into the specific commitments that schools make to shape the student experience. For example, Bennington Junior-Senior High School in Vermont indicated *1:1 mentoring* as a core practice. The Blue Valley Center for Advanced Professional Studies in Kansas opted to give *students meet industry professionals* a spot in its five core practices. Avonworth High School in Pennsylvania cited *flex model*, a model of blended learning, as a core practice. And Olympic Hills Elementary in Washington reported *social justice focus* as a core practice.

7. Canopy surveys didn't ask schools to report how long they've implemented their non-core practices. As a result, this data can't reveal implementation tenure for each practice across all schools.

8. Our analysis showed that *social-emotional learning (SEL)*, *project-based learning (PBL)*, and *competency-based education (CBE)* were reported the most often as core practices, and each appeared fairly mature on average. *PBL* was unique for being the most likely to be indicated as a core practice among schools that reported implementing it. Of the 158 schools that reported practicing PBL, just over half also reported that practice as core. This suggests that PBL is frequently practiced by innovative schools and often regarded as central to a school's overall approach.

9. Some schools reported these practices for less than a year because the school itself is less than a year old at the time of the survey. This is the case, for example, with Sojourner Truth Montessori School, a new public charter middle school in Washington, DC, which indicated that all of its core practices have been implemented for less than a year.

10. It's possible that some schools responding to surveys in August 2020 could have adopted these practices prior to the onset of COVID in March 2020, since "less than a year" would indicate adoption sometime after August 2019. Regardless, these were still quite new practices when the pandemic hit. If schools were still reporting those practices as core in 2020-21, it may be presumed that they have continued iterating on their early implementations during the pandemic.

11. As noted in the introduction, Canopy surveys ask schools to use tags only for practices that they implement at a schoolwide level. That means that practices should occur across grade levels and departments rather than in limited pockets, and should reach all students (or if not, they should reach a deliberately targeted set of students in an equitable way). As a result, respondents are discouraged from tagging practices that they have only begun experimenting with, or practices that have emerged but not yet been formalized at the school level.

12. The nine equity-focused practices selected were: *Designing for equity, culture of anti-racist action, practice of culturally relevant pedagogy, culture of restorative practice, trauma-informed instruction, reallocation of resources for those most in need, hiring prioritizes equity-focused values, social justice focus*, and *elimination of tracked classes*. Their full descriptions can be found here. These nine practices aren't the only ones that schools can implement with the goal of supporting marginalized students and confronting inequity, but they are the ones most explicitly designed to do so. (For example, *dual language programming* can be beneficial for English Language Learners, but may also be implemented in schools with exclusively native speakers of English, so it wasn't included in this set of equity-focused practices.)

13. We noted at least 114 high schools in the 2020-21 dataset of 232 schools. The total number may be higher, as some schools lack public data from NCES.

14. In order to do this, we identified clusters of practices in high schools using an exploratory factor analysis, then we calculated correlations between those clusters and contextual variables like school demographics, size, and locale.

15. Rural school leaders in the Canopy dataset tended to select fewer tags overall compared to their counterparts, which may partially contribute to this finding.

16. To answer this question, Canopy project leads followed an interview protocol drawing on Jobs to Be Done Theory https://www.christenseninstitute.org/jobs-to-be-done/.

17. This list was developed by Transcend in consultation with the organization's school partners and other advisors.

About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through Disruptive Innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society's most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach.

About the author

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