

EVALUATING THE IMPACT OF INNOVATIVE SCHOOLS

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Learning from the Canopy database

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THE *Canopy*



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ABOUT THIS REPORT

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CONTENTS

-----	Introduction	4
-----	Methodology	7
	Mixed Methods Analysis	7
	Quantitative Analysis	7
-----	Findings	8
	What outcomes are Canopy schools choosing to prioritize?	8
	How are Canopy schools measuring success on their prioritized outcomes?	11
	To what degree are innovative schools demonstrating evidence of impact?	14
-----	Implications	17
	The next authorization of ESEA should allow states to pilot new models for Title 1 school accountability	17
	Schools need tools and infrastructure to surface high-quality evidence of impact	19
	Federal, state, and nongovernmental agencies must work together to improve public data reporting	20

INTRODUCTION

All around the country, innovative schools are designing instructional approaches that challenge long-standing assumptions about school. These schools are compelling not just because they're different, but because a national scan [suggests](#) their innovations are addressing persistent inequities. The Canopy Project, a collaborative effort to catalog these learning environments and document their practices, features [251 schools](#) that shared information about their innovative approaches in a survey during Spring 2023.

For some education leaders, simply learning about the innovation efforts underway—regardless of their impact—is compelling. But for many policymakers, funders, researchers, school system leaders, and educators, it's not enough that these learning environments are getting creative with their instructional practices. They also want to know: What is the impact of those practices on student outcomes?

Estimating the impact of schools on learner outcomes is challenging even under the best conditions. Schools are complex ecosystems, embedded within communities, each with its own history, culture, assets, and resource constraints. Understanding the impact of the schools featured in the Canopy database adds an additional layer of complexity. Many of these schools are mission-driven, innovating in order to meet a need in their community—often serving populations of students who haven't been well-served by traditional schooling models. For these schools, and many others, traditional measures of school quality like achievement in math and English language arts (ELA) are important but insufficient. Schools in the Canopy database are actively working on supporting a broad range of outcomes for their students that include, but often extend beyond, traditional academics. These outcomes include priorities like deeper learning, student agency, and social and emotional competencies.

What is the Canopy project?

The [Canopy project](#) is a collaborative research effort, stewarded by the [Center on Reinventing Public Education \(CRPE\)](#) and [Transcend](#), to build collective knowledge about more equitable and student-centered approaches in schools. The project first invites a diverse group of education organizations nationwide to nominate learning environments whose work they believe to be promising. Then the project sends an annual survey to leaders from the nominated learning environments, asking them to share more about their work and the practices they implement at a school-wide level.

**Read more about
Canopy methodology [here](#).**

Traditional standardized assessments provide incomplete data in that they do not fully capture the work of Canopy schools. As scholars and policy groups seek to develop and propose new frameworks for understanding school quality, the Canopy schools can help us learn how to capture what matters more effectively.

The [**2022 Canopy Report**](#) highlighted that assessment and accountability policy was one of the top three policy factors most relevant to Canopy schools' ability to innovate. Our current federal policy frameworks for evaluating school program effectiveness present a real pain point for many school leaders, particularly those who are working to reinvent schooling and improve a wide range of student outcomes. Canopy school leaders want to evaluate students' success—and their own success—in ways that are different from the norm. Given this, educational assessment and school quality evaluation must advance to keep pace with the innovations in the field about what and how students are learning.

The Canopy Project is uniquely positioned to offer insight into the impact of innovative schools, given its catalog of many of the most innovative learning environments across the country, compiled with the help of hundreds of nominating organizations with deep understanding of the innovative schooling movement. To advance this goal, the Canopy Project contracted with [**Lyons Assessment Consulting**](#) and [**JC Research Group**](#) (JCRG) to lead a year-long project aimed at identifying the most promising tools, strategies, and frameworks for documenting the impact of innovative schools on young people's experiences and outcomes. As part of this effort, the research team led an exploratory investigation to understand the current evidence of impact among Canopy schools. Our investigation was driven by three guiding research questions:

1. What outcomes are Canopy schools choosing to prioritize?
2. How are Canopy schools measuring success on their prioritized outcomes?
3. To what degree are innovative schools demonstrating evidence of impact?



To answer these research questions, we conducted a mixed methods analysis on the Canopy survey responses and the evidence of impact uploaded by Canopy schools. Additionally, we estimated the impact of Canopy schools on traditional academic performance measures by constructing a nationally linked dataset and dashboard of school performance on state standardized assessment results.

Table 1. Summary of Research Questions and Key Findings

Research Question	Findings
What outcomes are Canopy schools choosing to prioritize?	<ol style="list-style-type: none">1. Most Canopy schools prioritize academics in the form of deeper learning rather than traditional outcomes.2. Canopy schools prioritize a wide array of outcomes that include both academic and non-academic goals.
How are Canopy schools measuring success on their prioritized outcomes?	<ol style="list-style-type: none">3. Most Canopy schools measure nontraditional outcomes using assessment tools they've created themselves.4. Few schools were able to publicly share evidence of impact, and those that did shared mostly traditional academic indicators and testimonials.5. A small number of schools shared evidence of impact beyond traditional academic indicators and testimonials.6. Documenting evidence of impact is a consistent challenge for schools.
To what degree are innovative schools demonstrating evidence of impact?	<ol style="list-style-type: none">7. State and federal data systems make it difficult to compare academic outcomes across states.8. Canopy schools with analyzable data appear to perform similarly to non-Canopy schools on traditional measures.9. Innovative schools with some evidence of success on traditional measures also focus on a broader set of outcomes.

From these findings, we draw three implications to inform the future of school impact evaluation:

1. The next authorization of ESEA should allow states to pilot new models for school accountability.
2. Schools need tools and infrastructure to surface high-quality evidence of impact.
3. Federal, state, and nongovernmental agencies must work together to improve public data reporting.

Methodology

Mixed Methods Analysis

The purpose of the mixed methods analysis was to identify the outcomes that schools choose to prioritize and the ways in which they measure progress toward those outcomes. Additionally, we sought to identify a wide range of schools that provided particularly compelling evidence of impact. Our analyses were conducted using the 2022 and 2023 Canopy survey results.

We drew on multiple questions from the Canopy survey to conduct our analysis. Below are five of the key survey questions we used:

- How would you describe the student experience that the learning environment is designed to create?
- Are any of the following practices being implemented school- or site-wide this school year? (Response options: assessments for deeper learning; assessments for social-emotional skills; assessments for career readiness; assessments for agency and self-directed learning; performance-based assessments; bilingual assessments.)
- For each type of assessment, if yes, do you create the materials yourselves, purchase them from a vendor, and/or receive materials from a partnership/organization/system?
- Does your learning environment use a “portrait of a graduate” or “graduate profile” that describes the skills, knowledge, and/or mindsets that students should have by the time they “graduate?” If so, please share.
- Is there any evidence of your impact on learners that you want to share? This could include assessment results, student work, testimonials, etc.

Our analytical approach included several steps. First, keeping the research questions in mind, we developed a set of codes (i.e., words and phrases that researchers assign to categorize a segment of the data by topic) for reviewing survey responses and the evidence schools chose to share. We calibrated to make sure our codes accurately reflected analysis

of the data and addressed the research questions, then created a second iteration of the codes, collapsing, combining, and synthesizing related codes into broader themes. Finally, we counted the frequencies of the codes across each variable to better understand which schools in the dataset exhibited evidence of each “topic” or code.

Quantitative Analysis

The purpose of the quantitative analysis was to explore what we could learn from existing publicly available data about the academic performance of Canopy schools. Traditional standardized assessments have inherent limitations in measuring the impact of innovative schools. Innovative schools prioritize outcomes that go beyond traditional academics and also adopt models of teaching and learning that may be better understood through student performance on more authentic forms of assessment. Despite these limitations, statewide assessment data continues to be the best viable option for approximating a nationally comparable dataset to examine the performance of Canopy schools.

Our comparative analyses relied on publicly available school achievement data for the 2021-2022 academic school year in mathematics and English language arts (ELA). Given that state assessments and proficiency standards vary considerably across states, student performance data can not be directly compared across states. To overcome this issue, we applied a statistical modeling technique known as heteroskedastic ordered probit (HETOP) modeling, along with the psychometric process of linking, to estimate school-level means and standard deviations on a common standardized scale. This process, pioneered by the [Education Opportunity Project at Stanford University](#), allowed us to compare each Canopy school to a synthetic control group of non-Canopy schools, which may be presumed (in aggregate) to use more conventional approaches. By comparing each Canopy school to a control group of non-Canopy schools serving similar populations of students, our goal was to identify which Canopy schools, if any, are outperforming expectations.

FINDING 1

Most Canopy schools prioritize academics in the form of deeper learning rather than traditional outcomes.

Traditional academic student outcomes are typically defined as test results, grades, credit accumulation, and high school graduation. Meanwhile, nontraditional academic student outcomes, such as deeper learning, are usually characterized by students demonstrating mastery of academic content through a broad range of indicators. More specifically, deeper learning is defined as developing students' abilities to think critically and solve complex problems, communicate effectively, work collaboratively, and learn independently within the context of core academic content. Students are engaged in learning and demonstrating mastery of academic content through applying their knowledge and skills to relevant and authentic real-world problems (e.g., projects, performance assessments).

Ninety-five percent (95%) of Canopy schools name deeper learning as a prioritized outcome. For example, Cibola High School, a public district school in Yuma, Arizona that is designed to meet the needs of multilingual learners, has delineated the outcomes they prioritize in their portrait of a graduate. Those outcomes include students being empathetic, self-aware, and resilient learners, as well as collaborators, communicators, and critical thinkers. Their competencies for critical thinking include: "[Yuma Union High School District] graduates will identify/develop important questions/problems, express them with clarity, and research a variety of credible sources to gather evidence and data to help them explore answers/solutions, mastery of which requires traditional academic skills such as literacy, but also a broader set of transferable abilities." Similarly, New School of San Francisco in California, a K-8 public charter school committed to anti-racist teaching and learning, wants graduates to be creative problem-solvers because "inquiry is embedded into all we do with opportunities in the curriculum for students to grapple with real-world challenges and develop ideas and solutions that have a positive impact on the world."

Canopy school spotlight

St. Paul School of Northern Lights in St. Paul, Minnesota, is a public charter school founded on three pillars: the Reggio-Emilia methodology, play-based education, and the Finnish education system. Founded by a group of parents who came together wanting a better learning experience for their own kids, St. Paul of the Northern Lights is in its fourth year and serves grades K-8, drawing students from all over the metropolitan area. Students engage in long-term projects, spend a significant amount of time outdoors, have extensive play time, and play a significant role in determining the curriculum and activities teachers create. The metrics and tools for gathering data are decided by the community, with goals centering around innovative practices. The community views student success as the ability to connect learning between content areas and to the school and broader community in authentic ways. This is evident in the school's yearly "Exhibition of 100 Languages," a student learning journey exhibit, and the weekly Moment of Wonder, a differentiated classroom experience where students dive deeply into a topic. The school community creates campus goals, metrics, and tools for gathering data, with goals centered on the implementation of innovative practices. Though the state evaluates schools by students' academic performance, the school's leaders hope for more opportunities to be evaluated on students' feeling of connectedness to each other and to their learning. They also hope they are not evaluated solely on student performance such as standardized test scores, but also on metrics like the quality of classroom instruction.

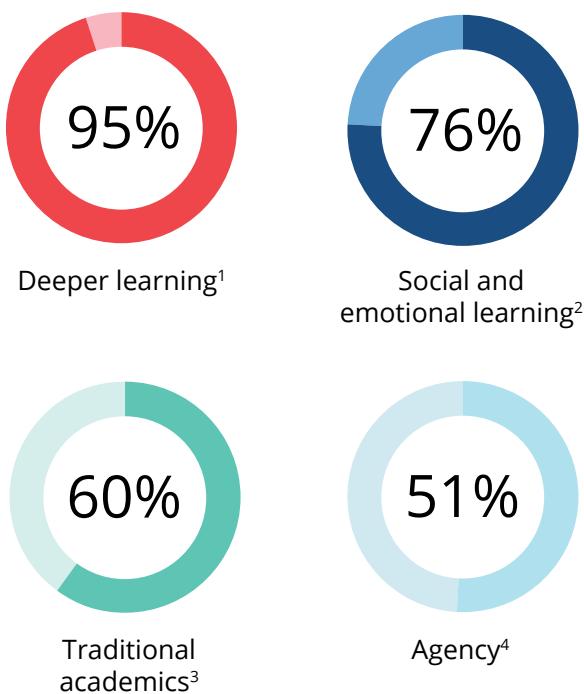
Based on the results of the limited quantitative analysis we conducted, we failed to identify any school that performed above expectations in a statistically significant way. However, each of the schools featured in the sidebars throughout this report did perform better than expected according to our model (i.e., their actual achievement was higher than their predicted score).

FINDING 2

Canopy schools prioritize a wide array of outcomes that include both academic and non-academic goals.

Canopy schools prioritize multiple outcomes beyond traditional academics. For example, 76% of Canopy schools report prioritizing social-emotional learning (SEL) outcomes. We define SEL as the process through which people develop healthy identities; manage emotions and achieve personal and collective goals; feel and show empathy for others; establish and maintain supportive relationships; and make responsible and caring decisions.

Figure 1. Percentage of schools prioritizing key student outcomes



For example, [5280 High School](#), a public charter school in Denver, Colorado, is a recovery high school that serves students who want to learn how to live a substance-free life. The school's annual report describes a typical day:

"Each morning, students engage in 45 minutes of recovery support. This is often initiated by students who bring a topic of concern they may be facing at that moment (i.e. relationship trouble, recent relapse, mental health concerns, poverty, etc). Students are given the opportunity to share, and other students/staff provide encouraging words and overall support. Sometimes these meetings involve guest speakers or one-on-one mentoring. After this daily meeting, students attend three academic classes of 90 minutes each. The focus is on academics, but if a student is facing a crisis, recovery staff assist them as needed. After the academic classes are over, the final class of the day is a 45-minute "wellness elective" that promotes social, emotional, or physical wellness."

¹ Deeper learning develops students' abilities to think critically and solve complex problems, communicate effectively, work collaboratively, and learn independently. Students are engaged in learning core academic content and applying that knowledge to relevant and authentic real-world problems.

² Social-emotional learning (SEL) is the process through which people acquire and apply the knowledge, skills, and attitudes to develop healthy identities; manage emotions and achieve personal and collective goals; feel and show empathy for others; establish and maintain supportive relationships; and make responsible and caring decisions.

³ Traditional academic outcomes include measures such as test results, grades, credit accumulation, and high school graduation.

⁴ Student agency is the capacity for students to set a goal; reflect and act responsibly to effect change; and play an active role in deciding what and how they will learn.

The average day at 5280 centers student wellness socially, emotionally, and physically. Similarly, [Dził Dítłooi School of Empowerment, Action, and Perseverance \(DEAP\)](#), a public charter middle and high school in Navajo, New Mexico, fosters a culture of wellness steeped within cultural values. Students engage in a reflective process about where they are in their wellness journey and how their wellness interacts with their community's well-being. As one school leader from DEAP put it, "We have quite a few students who have been expelled from other schools and they come here and you give them the support ... you let them know that it is safe to talk about these things."

Additionally, about half of Canopy schools (51%) indicate that they prioritize outcomes related to student agency and voice. Student agency is defined as the capacity for students to set a goal, reflect, and act responsibly to effect change. In schools prioritizing this outcome, students typically play an active role in deciding what and how they will learn. For example, [One Stone](#) is a student-led and student-directed nonprofit in Boise, Idaho, that created its own private school (Lab51) and also supplements the traditional high school experience. It encourages students to "work collaboratively with coaches who don't tell them what to learn or when to learn it, but instead guide each person's learning journey according to their own personal experience, unique passions, and preferred pace." Student agency is evidenced by their webpage "[Our Voice](#)" that includes a collection of student voices through performances, interviews, and films. According to their website, "At the [One Event 2020](#), several students shared deeply personal stories about moments that have changed their lives. [Christian R.](#), a learner in the lab school, took the stage to tell about how One Stone helped him regain a sense of pride — something he once risked to try to fit in with a group of so-called 'friends.'"

Furthermore, many Canopy schools center equity by providing more than just educational services, and positioning students as agents of change. For example, [Fannie Lou Hamer Freedom High School](#) is a public district school in Bronx, New York, located in what was historically known as the poorest congressional district in the United States. School teachers and leaders work to close the gaps in

learning opportunities for students by meeting basic needs: "Our families are suffering from the ravages of poverty, unemployment and homelessness. Students cannot focus on learning when their basic needs are not met. Partnering with Children's Aid Society brings support to families at the school level. ... I believe that our success as a school comes from students knowing that we are supporting them as a whole person, as a member of a family and as a community." Additionally, the school details their commitment to addressing structural inequities by engaging their students in anti-racist, project-based learning experiences that examine and seek to disrupt systemic oppression. For example, [students engaged in a project](#) that highlighted the abysmal air quality in the South Bronx and its impacts on youth asthma rates; they shared their work with local policymakers, advocating for community improvements.

Canopy school spotlight

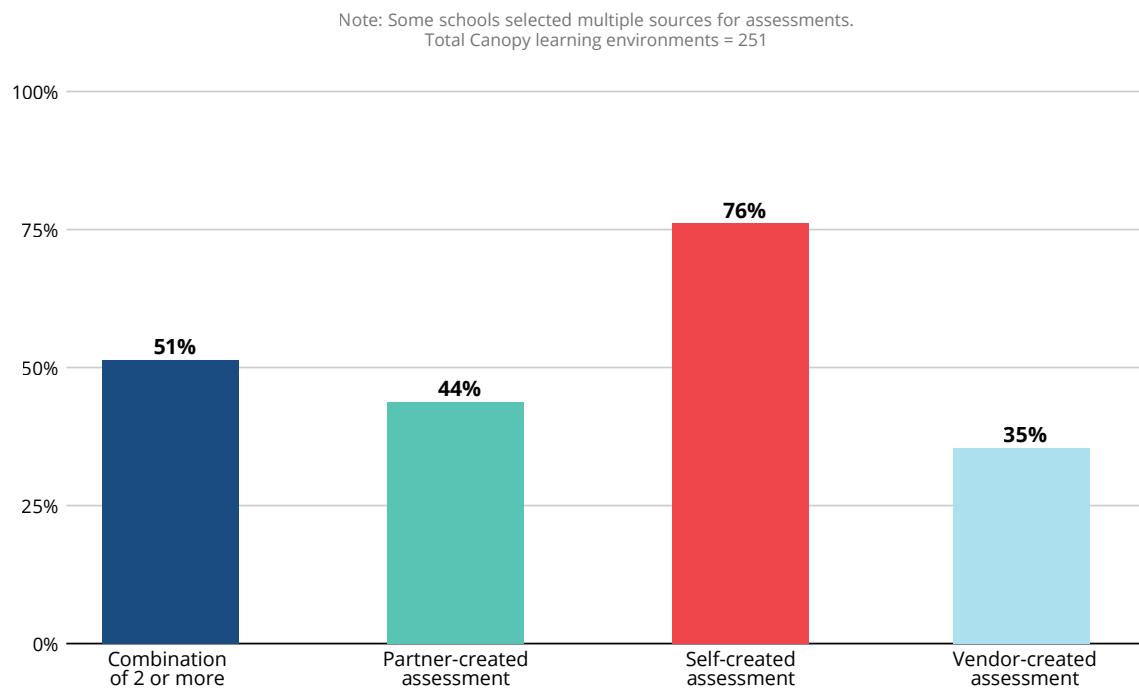
[Vista Innovation & Design Academy](#), or VIDA, in Vista, California, is a public magnet middle school that states "innovation is part of their tradition." Serving approximately 807 students in grade 6-8, VIDA's motto is "INNOVATE, DESIGN, CREATE!" Prioritizing the whole child, deep learning, and social-emotional skills as student outcomes, VIDA students engage in creative and critical thinking by incorporating design-thinking skills into their curriculum to support problem-solving using nontraditional solutions. The school structures itself in order to foster creativity and allow students to develop their skills in a personalized learning environment. According to the school's founding principal, "Schools have souls, and those souls need to be nurtured." To nurture those souls, the learner experience must identify and leverage student potential and strengths. VIDA aims to create learning experiences that engage a student's heart and mind, and defines success as when students display agency over their learning and are intrinsically motivated to deepen their knowledge. This is evident in VIDA students seeking internships and work-based learning experiences that are not typically found at the middle school level. Learn more about VIDA at vida.vistausd.org.

How are Canopy schools measuring success on their prioritized outcomes?

FINDING 3

Most Canopy schools measure nontraditional outcomes using assessment tools they created themselves.

Figure 2. Source of unconventional assessment materials in Canopy schools



According to the Canopy survey responses, and as shown in Figure 2, participating schools report using their own assessment tools to measure nontraditional outcomes more frequently than partner- or vendor-created assessments. For example, [The Center for Advanced Research and Technology](#), a public district high school in Clovis, California, states, "Student projects [focus] on designing video games based on novel plots, the neuroscience of illusions, real-world environmental assessments and many more. Lab teams excelled

at sharing their academic knowledge, skills, and teamwork. Six student teams presented to community judges. The top prize went to a team from the Law and Policy Lab. The team advocated that body-positive lessons they designed would combat body shaming among elementary-school-age students." Among schools that reported how they assess deeper learning, nearly three-quarters create assessment materials in-house. And among schools that reported how they assess SEL, about half create their own assessment materials.

FINDING 4

Few schools were able to publicly share evidence of impact, and those that did shared mostly traditional academic indicators and testimonials.

Only about 20% of Canopy schools provided evidence of impact, and of those schools, the vast majority uploaded traditional academic indicators and testimonials as examples of how they are measuring it. Traditional academic outcomes include standardized test results, course grades, credit accumulation, and high school graduation. For example, [**Kairos Academies**](#), a K-8 public charter school in St. Louis, Missouri, shared that “In only our 4th year, Kairos is the fourth highest performing local education agency in St. Louis” as measured by [**NWEA MAP**](#) scores on ELA, mathematics, and science achievement tests. Additionally, it was featured as the only elementary/middle school in St. Louis [**“beating the odds” in mathematics for students receiving free and/or reduced price lunch.**](#)

Similarly, [**The Academy of Advanced Learning**](#), a K-8 public charter school in Aurora, Colorado, shared that it received the state’s most prestigious education award for academic growth and transformational impact in 2019. [**Concourse Village Elementary School**](#), a public district school serving mostly Black and Latinx students in New York City, shared that: they were ranked better than 95.8% of all elementary schools in the city in 2017; in 2018, 88% of students scored advanced or proficient on the state standardized exams in ELA and math;

and it received a Blue Ribbon Award for Exemplary Performance.

Testimonial evidence includes perception surveys, as well as written and verbal testimonials from various stakeholder groups such as parents, students, teachers, staff, and community members. For example, [**Red Bank Elementary School**](#) in Lexington, South Carolina, a public district school, uses student survey responses to talk about their evidence of learning. Red Bank leaders state that students respond positively to the following indicators: “We unpack standards or learning targets in my classroom … my classroom has a data wall to track mastery of learning. … When I have mastered a learning target or standard, I can move on to the next.” As another example, a founding parent at [**DeKalb Brilliance Academy**](#), a public charter elementary school in Decatur, Georgia, shared on social media how impressed she was with the school’s project-based learning exhibition: [**“It is amazing to be able to see what kindergarteners, first graders, and second graders can do.”**](#)

[**Keres Children’s Learning Center**](#) in Cochiti Pueblo, New Mexico, is a private microschool serving infants through elementary grades. The Montessori and language revitalization school uses an intergenerational approach to language immersion in Keres (a Native American language). Elementary students, parents, staff, and community members discuss the ways they measure success [**in a video**](#). Students’ ability to communicate in Keres with their families and community provides powerful evidence of impact.

Canopy school spotlight

[**Girls Athletic Leadership School \(GALS\)**](#), or GALS, is a public college preparatory school in Denver, Colorado, providing gender-specific education to empower students to “succeed academically, lead confidently, live boldly, and thrive physically.” The young women and non-binary youth who attend this school develop a strong sense of who they are, why they matter, and what matters to them to be powerful agents of change. Founded 13 years ago on the goals of gender equity and feminist justice, GALS is the only public positive-gender school in the state. School leaders report that movement-based learning is a core school model, with physical movement being the link to social-emotional, academic, and cognitive wellness. GALS provides its students with signature, customized courses in middle and high school that teach them leadership and social-emotional learning to successfully reach their goals. School leaders report that mental health is an important aspect of student well-being and the school provides integrated support, including access to licensed counselors for all students and explicit instruction around de-escalation and coping skills. These interventions help ensure mental health does not create a hurdle or barrier to success. Students report higher self-efficacy, self-esteem, and greater willingness and ability to take risks to aid their cognitive growth.

FINDING 5

A small number of schools shared evidence of impact beyond traditional academic indicators and testimonials.

Given that the vast majority of Canopy schools prioritize a wide range of outcomes beyond traditional academics, we expected to see them share unconventional measures to show results in areas like deeper learning, SEL, and student agency. However, only a small number of schools uploaded evidence beyond traditional academic indicators and testimonials. Of those that did, the evidence provided a powerful window into the work of the schools and their impacts on students. For example, as previously mentioned, 5280 High School in Denver, Colorado, is a project-based learning community committed to serving students who struggle with substance abuse, self-harm, eating disorders, and other destructive behaviors. In addition to measuring their academic outcomes, the school shares that:

110 at-risk students avoided first-time entry or recidivism into the criminal justice system;

150% self-reported increase in their quality of life since enrolling; and

95% of students achieved and maintained long-term sobriety.

As another example of a powerful impact indicator that is meaningful to a particular school and the population it serves, the [**Career Academy High School**](#) in South Bend, Indiana, reports a 88.2% pass rate of seniors taking the U.S. citizenship exam for their U.S. government course in the 2022-23 school year.

FINDING 6

Documenting evidence of impact is a consistent challenge for schools.

Documenting and sharing evidence of impact on non-academic outcomes remains a consistent challenge for innovative schools. As previously mentioned, fewer than 20% of schools uploaded evidence of impact on the 2023 Canopy survey, and we also heard about this challenge more deeply from the school leaders during our case study interviews. For example, a leader at [**Girls Athletic Leadership School**](#), a public college preparatory school in Denver, Colorado, shared, "We have ways to measure academics, but we don't have universal ways to measure the social, emotional, relational, and mental health of students. [Student wellness is] not a linear thing. ... It goes in cycles and depends on the environment and what's happening. ... It's a harder qualitative thing to measure." Similarly, [**Detroit Prep**](#), a K-8 public charter school in Detroit, Michigan, shares that it is challenging to succinctly quantify impact: "Standardized test scores are fine and showing growth but [don't] accurately show the full impact of what is happening. ... Students are tying the learning to the outside world which is more challenging to quantify and communicate as an impact."

[**DREAM Charter School**](#) in East Harlem and Bronx, New York, is an example of a Canopy school that is leading the way in sharing impact on nontraditional outcomes. For example, the school shares that 73% of students have experienced growth in SEL competencies in one year. Students also have been accepted to prestigious colleges (including Stanford, Yale, and New York University), and been hired by major employers (such as Google, NBC, and various hospitals). This level of detail is publicly available, and administrators clearly understand how to communicate the various ways that students are achieving established goals.

FINDING 7

State and federal data systems make it difficult to compare academic outcomes across states.

In this exploratory study, one thing we were testing was the feasibility of systematically comparing publicly available academic outcomes between Canopy schools and similar schools not in the Canopy project. Though not a “finding” in the traditional sense, one important discovery we made was a hard lesson in the lack of transparency, data quality issues, and methodological challenges of accessing and analyzing state achievement data for this project. The opacity of state and federal data systems not only presents a problem for the Canopy project, but for making informed educational policy decisions more broadly.

The federal government has a long-standing precedent of making state assessment results available for policy makers, researchers, and the general public via the [EDFacts Initiative](#). This program, run by the U.S. Department of Education, centralizes the collection of education data from state agencies. EDFacts creates downloadable datasets that contain school-level information related to academic performance, demographics, and other variables for all states. The primary benefits of accessing EDFacts data instead of the individual state files from state agency websites are:

1. EDFacts only suppresses data when the sample size is less than 5 students, whereas states suppress data using a higher threshold. States have minimum sample sizes for reporting that range from 10 students to 30 students. This means that in the individual state files, there are much higher percentages of missing data, particularly for subgroup reporting and small schools, than in the EDFacts data.
2. EDFacts releases data in a common format across states to easily support analysis. Each state releases its assessment data in its own, idiosyncratic format using unique data labels and structures.

Despite the benefits of EDFacts, this data source was not viable to support our analysis for two reasons. First, EDFacts is slow to release its data, and the academic achievement information from the spring of 2022 was not yet available as of September 2023. Second, and more importantly, beginning in 2021 EDFacts made a policy change to no longer collect and report information about student performance relative to the state-determined achievement levels. Instead, EDFacts only collects and reports performance relative to proficiency determinations. This reduces the amount of information available and prevents us from using the HETOP methodology to link each of the individual state assessment scales to a common scale.

This means that in order to attempt to estimate school-level performance on a common scale across states, our research team needed to rely on the individual state files. Gathering and restructuring the individual state data files was a highly labor-intensive process. In many cases, state assessment results were difficult to find, and for at least eight states or territories, the data wasn’t available at all as of Spring 2023. For an additional six states and territories, the public data wasn’t usable because performance was only reported relative to proficiency, rather than achievement level, which is needed for the HETOP modeling.

Given the vast public investment in statewide assessments of academic achievement over the past two decades, the very fact that there are few viable paths for accessing, analyzing, and interpreting a nationally comparable dataset is problematic and should be addressed through inter-agency cooperation or partnerships with a nongovernmental organization.

Canopy school spotlight

Detroit Prep, a K-8 public charter school in Detroit, Michigan, is designed for students to develop a strong sense of identity and belonging, develop habits of character, and apply their learning to the broader world. Founded in 2016, Detroit Prep serves close to 300 learners, who mostly live within a one-mile radius of the school. As a hands-on learning school, Detroit Prep wants their graduates to have strong character and culture, master knowledge and skills, produce high-quality work, and engage in inquiry-based self reflection. School leaders report they evaluate their students holistically, using student reflections and portfolios of learning. These portfolios are measured against criteria including the “beauty” of the work in both concept and execution and its application to the broader world. Students choose and set a weekly character goal to practice and then engage in self-reflection on how they did. Detroit Prep leaders report they find it challenging to articulate impact on the broader set of measures that they prioritize most highly and are aiming to find future opportunities to measure and communicate impact centered around student happiness, community connection, and learning outside the classroom.



FINDING 8

Canopy schools with analyzable data appear to perform similarly to non-Canopy schools on traditional measures.

Due to the data challenges described in the finding above, our final analytic sample was able to capture only a small proportion of Canopy schools and produce rough estimates of schoolwide achievement. For the small, non-representative sample⁵ of schools we were able to compare, statistical analyses demonstrated that these schools overall performed similarly to non-Canopy schools. In other words, the Canopy schools are relatively evenly distributed around the mean estimates of their comparison schools. No schools significantly outperformed or underperformed expectations according to our most rigorous test of statistical significance. This finding provides some support for the claim that innovative educational practices show no net-negative effects on traditional student learning outcomes as measured by statewide standardized assessments.

DREAM Charter School is a network of public charter schools serving students in grades K-12 across East Harlem and the Bronx. The DREAM elementary schools are guided by a whole-child model rooted in the belief that if every child feels seen, known, and loved, and is provided with rigorous academic instruction, social-emotional support, and physical health and wellness, they will have space to grow into leaders, innovators, and changemakers. DREAM elementary schools use a co-teaching model, with each elementary classroom having two teachers. Schools also provide free after-school and summer programming to help keep kids stay engaged all day and all year in activities centered around academics and social-emotional wellness. The schools have outperformed their city and state peers in testing for the last four years. As important, they have helped students “build that confidence in wanting to push forward and do better.”

FINDING 9

Innovative schools with some evidence of success on traditional measures also focus on a broader set of outcomes.

Based on the results of the limited quantitative analysis, we failed to identify any school that performed above expectations in a statistically significant way. However, each of the schools featured in the sidebars throughout this report did perform better than expected according to our model (i.e., their actual achievement was higher than their predicted score). For each of these schools, we interviewed school leaders, or, if leaders could not be reached, we completed a document review of publicly available information. The purpose of these school interviews was to better understand:

- The mission of the schools and the population of students served;
- The innovative schooling model adopted by the school;
- The outcomes the school cares most about for its students and how its innovative schooling model supports those outcomes; and
- How the schools document evidence of impact and the challenges they face when measuring and communicating about their success.

The sidebars shed light on the fact that even though these innovative school environments have demonstrated some evidence of success on their statewide standardized test scores, the schools' missions and models are focused on a much broader set of outcomes than test performance.

⁵The schools in our analytic sample are disproportionately larger, located in states with greater data transparency, and are all traditional public or public charter schools (academic achievement data for independent schools are not publicly available).

Implications

The findings in this report represent an ambitious undertaking on behalf of the Canopy Project to understand how Canopy schools impact learner outcomes. Our goal is to chart an informed path forward for more rigorous and nuanced evaluations of innovative school environments. Not only does our learning from this project provide key insights for informing the design and approaches for innovative schools, but this exploratory study surfaced important lessons that can inform the future of school quality evaluation more broadly.

1. The next authorization of ESEA should allow states to pilot new models for Title 1 school accountability.

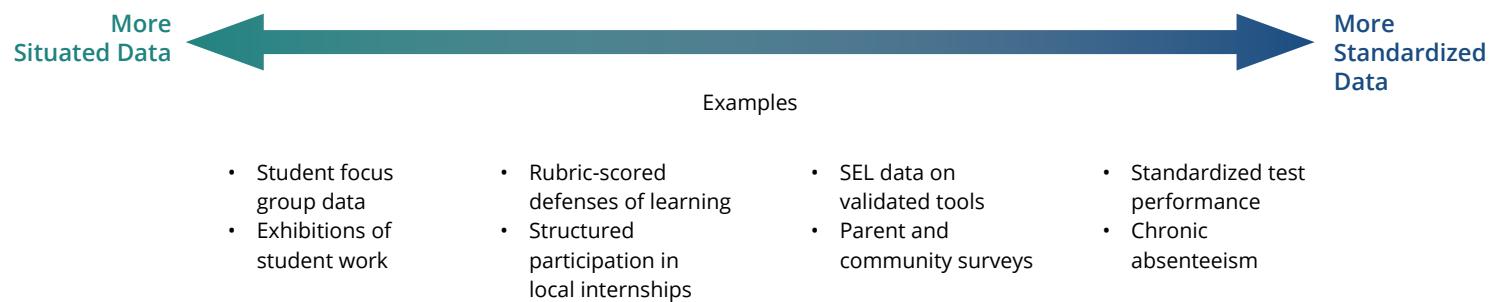
Over the past 20 years, the federal model for public school accountability has remained largely the same. Federal law requires that states administer standardized assessments of academic achievement and use the results, in conjunction with a limited set of other comparable indicators, to rank schools. This system relies on standardization as the primary mechanism to achieve comparability (i.e., comparing the results from different schools on the same set of indicators to make normative determinations about program quality). While we understand the need for comparable data, standardization is inherently limited in capturing a more complete understanding of individual program quality. The next authorization of the Elementary and Secondary Education Act (ESEA) should expand the Innovative Assessment Demonstration Authority (IADA) to allow states to pilot new models for school accountability that could incorporate more “situated data.” We use the term “situated” to refer to a range of data points that are not standardized across the state, but instead are generated through local processes that capture additional, more site-specific dimensions of quality. Situated data better reflect local priorities and capture the richness of the work that schools do (e.g., student defenses of learning, student participation in a local apprenticeship program, community survey data).

Standardization demands a certain level of abstraction from the phenomenon being measured. For example, the best way to understand if a student is engaged in school is to talk with them about their activities, interests, past experiences, and social connections with peers and educators. When we try to use a standardized tool like a survey to capture student engagement, we assume that the construct of “engagement” is real, well-defined, and measured in the same way for everybody. However, what engagement means and looks like for any single student is necessarily related to the particularities of that student and the communities and cultures of participation with which the student is engaging. A standardized survey of student engagement might reveal some of the same information as a more situated observation or interaction, but it will certainly lead to the wrong inferences for some students, and may be disproportionately wrong based on systematic factors such as language and culture. The same principle applies when making inferences about student learning from standardized measures of academic achievement as opposed to more situated or localized assessments, such as educator observations or authentic student work. Given the situated nature of students and schools within communities, cultures, histories, and sociopolitical contexts, we argue that the school quality is better understood using a mix of both standardized and more situated indicators.



Figure 3 shows how school quality data can be placed on a continuum, ranging from more situated to more standardized. Current school accountability systems rely exclusively on data sources that are standardized statewide, which weakens the public's understanding of the quality of any given local school program. While we still need cross-site comparisons, the complex work of schools demands complementing comparable information with more situated data to generate a more nuanced understanding of school quality.

Figure 3. Continuum of standardization for school quality indicators



Many states and districts are already working outside of their federally approved accountability systems to explore innovations in school quality systems that can incorporate more locally situated forms of data. For example, state agencies in [Colorado](#), [Kentucky](#), [New Mexico](#), and elsewhere are creating learning partnerships with schools and districts to pioneer new methods that lift up the values of local communities.

Our exploration of the schools in the Canopy database used both situated and standardized data sources to support richer understandings of school program quality. The next authorization of ESEA should allow states to create mechanisms that can accommodate both situated and standardized forms of data within Title 1 accountability, which would support more accurate interpretations about program quality and provide more actionable insights for improvement. Of course, because situated data cannot be directly compared across schools and districts for the purposes of ranking schools, the mechanics of how schools are identified for resources and support would need to evolve as well. Just as multiple forms of data open the door for improved interpretations about school quality, they also can lead to more intentional and impactful resources allocations and systems of support.





2. Schools need tools and infrastructure to surface high-quality evidence of impact.

Updating school accountability systems to incorporate rich local data is a necessary but insufficient step to improving the quality of evidence on learner impact; schools also need support to surface and share high-quality evidence of impact. Based on our year-long exploration using the Canopy database, we believe schools would benefit from additional support: tools to generate evidence of impact on the broad range of desired outcomes, and data infrastructure to organize and share the data.

Canopy schools need tools to gather local outcome data. The vast majority of Canopy schools care deeply about multiple outcomes that go well beyond traditional academic indicators, but they predominantly use self-created tools. It is unrealistic and uneconomical to expect classroom educators and school administrators, exhausted from a day of hands-on work with students, to go home and build new, high-quality assessment tools from scratch on their nights and weekends. They need access to high-quality tools that they can adopt or adapt to their own contexts. Additionally, the availability and use of common tools might eventually help facilitate more nuanced impact evaluations across schools that don't rely exclusively on the publicly available academic test data.

Existing infrastructure is weak for gathering and publicly sharing data related to nontraditional outcomes. When schools aren't creating their own assessment tools, they often rely on free or commercial instruments to evaluate some of their prioritized nontraditional outcomes (e.g., [Transcend's Leaps Student Voice Survey](#), Panorama surveys, etc.). However, even when they are using these validated and research-backed tools, the collection and use of the data is idiosyncratic by site. There is no widely adopted infrastructure for sharing data with the public or analyzing outcomes across locales. New and growing technologies (e.g., [Mastery Transcript Consortium](#), [Ednovate's Whole Child Report Card](#), [Education Commonwealth Project's School Quality Framework](#)), offer a glimpse into emerging tools that could support the organizing and sharing of outcomes data. A new generation of AI-assisted assessment tools may also be a game-changer for surfacing and sharing rich local evidence.

Investing in tools and data infrastructures that support the public sharing of student outcomes beyond traditional academics would go a long way towards improving future evaluations of school impact.

3. Federal, state, and nongovernmental agencies must work together to improve public data reporting.

Although not all innovative schools cite traditional measures of academic learning as their top priority, policymakers, parents, and the public continue to value these measures. They care whether schools are providing equitable opportunities for students to learn core academic content. Despite their limitations, standardized statewide achievement tests come the closest to providing an accessible source of comparable student achievement data.

As detailed in Finding 7 of this report, the significant challenges that our research team experienced when trying to access and analyze student achievement data speaks broadly to the lack of interpretable outcomes data at the national level. Due to the recent policy changes at the *EDFacts* Initiative, the public is left with no reliable source to critically examine school-level performance on state achievement tests across the country in the post-pandemic era. Federal *EDFacts* data is now reported at too coarse a level to estimate performance on a nationally comparable scale, and state-provided data files suppress too much data to achieve reliable school-level estimates.

The federal government's *EDFacts* Initiative should gather and share data on the number of schools scoring at each performance level, and ideally also provide information on mean scale scores and ranges, rather than binary proficiency ratings that provide too crude an estimate for meaningful analysis. Given the deep commitment that the federal government has made to standardized testing over the past 20 years, this relatively minor improvement to data transparency in reporting would yield a disproportionately positive impact on the utility of the data for the Canopy Project and many others.

In addition, state education agencies should consider committing to greater data accessibility by adopting a common reporting standard for their academic achievement data. States defining and choosing to opt into a common set of reporting timelines, suppression rules, data elements, and file structures would go a long way to increasing the usefulness of state files for national achievement comparisons.

Alternatively, non-governmental agencies could pool resources to gather and share data, using existing state websites and data reporting structures. For example, the Canopy Project could partner with other organizations interested in national data analysis, such as [The Education Opportunity Project at Stanford University](#) and the [COVID-19 School Data Hub](#), to arrange data-use agreements with all states and territories and make non-suppressed data files available in a common format to universities and other research organizations. However, this effort would be costly and time-intensive, and would largely be recreating the work that *EDFacts* was designed to do. It would be far preferable for the federal government to take the necessary steps to improve the *EDFacts* data collection than for the field to be forced to create a parallel system.

