

BALTIMORE CITY PUBLIC SCHOOLS

USING DATA FOR EQUITABLE CTE OUTCOMES

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In early 2020, Baltimore City Public Schools (City Schools) launched an initiative to deepen the review of its Career and Technical Education (CTE) programming over a four-year period to improve employment and earnings for students after they graduate. As City Schools' chief executive officer Sonja Brookins Santelises explained, "The challenges presented by the pandemic have further accelerated what we already knew to be true: the world our students enter upon graduation requires a different level of preparation than what we have traditionally provided to them. . . . Career readiness—and CTE specifically—is yet another forum for developing knowledge and skills in a meaningful, personal context."¹

City School's CTE programming review included efforts to improve the alignment of its CTE offerings to regional labor market demands that pay a family-sustaining wage; strengthen the quality of programs to align with employer needs, work-based learning opportunities, and supports for transition after high school; improve the geographic distribution of programs and resources across the city to ensure equity in student access; and maximize the use of existing resources.

City Schools partnered with Project Evident to delve more deeply into their student data to help identify challenges and opportunities as part of

their strategic planning process. With those recommendations in hand, City Schools and Project Evident are continuing their work together to develop and support the implementation of a four-year career readiness strategy.

City School's Office of College and Career Readiness—which oversees implementation of the CTE programs in the district—was committed to taking a data-driven approach in developing a four-year CTE strategic plan. However, owing to the timing of the work, City Schools experienced both financial and technical capacity constraints. As a result, several organizations came to the table to ensure the project's success. These partner organizations included Baltimore City Public School's Office of College and Career Readiness, which was responsible for sharing data, coordinating site visits, engaging the community, and engaging in decision making and trade-off discussions; Project Evident, which served as an external consultant to City Schools and was responsible for conducting data analysis, reviewing internal processes and documents, providing recommendations for implementation, and supporting with community engagement and program implementation; and Baltimore Fund for Educational Excellence with the support of Annie E. Casey Foundation, which provided the philanthropic support that allowed City Schools to undertake this work.

City Schools and Project Evident engaged in this project in the spirit of true partnership, as both partners were focused on improving the opportunities and outcomes of the students and families. Both parties recognized and appreciated the fact that there would be moments where they would have to work with imperfect information; they were aligned in the belief that parent, school, and community feedback was a critical source of information; and they both recognized the importance of being responsive to City Schools' timeline.

To meet City Schools' goals within that timeline, Project Evident set up an infrastructure that allowed City Schools to securely upload relevant data and background documents, and maintain a shared work plan. Both partners also agreed to a set of partnership management principles around points of contact, communication cadence and preferences, and a shared commitment to meeting key deadlines.

This approach to the engagement ensured that the work was relevant and timely. Just as importantly, however, was the evidence used to help City Schools make different trade-off decisions. City Schools sought to extract insights from existing data sets to determine what CTE programs to offer going forward and, prioritizing equitable access, determine how

the programming should be distributed geographically across the city. To ensure that City Schools had the most relevant information to support its decision making, over a four-month period between January and April 2020, City Schools partnered with Project Evident to answer a series of critical questions, including: How do current CTE programs align with in-demand, living wage jobs in the region? How can our pathways be realigned to reflect trends in labor market demands and student interests? How can our programs be situated across the city to allow for equitable access for City Schools' students?

To address these questions, Project Evident provided analytical and decision making support to City Schools. First, Project Evident analyzed data on employment and wage projections for occupations in industries targeted by the CTE programs to assess labor market demand and earning potential, and analyzed recent student- and school-level data to assess the demand, distribution, and capacity of program offerings, as well as student access, engagement, and outcomes. Project Evident complemented these analyses by having conversations with students, teachers, principals, district leaders, and CTE staff to capture their perspectives on existing policies and processes and best practices. Finally, Project Evident mapped all programs and schools against City Schools' Community Condition Index—a measure of a community's access to resources—and students' ability to access the program based on travel time on public transportation.

Project Evident took all this data and used it to develop recommendations for the next three school years to either sunset, scale back, maintain, or expand CTE offerings with a lens toward equity. Project Evident also led workshops with school leadership and staff to support decision making and to discuss trade-off and implementation considerations.

In the second part of the engagement, City Schools sought to assess the feasibility of these recommendations by collecting, generating, and reviewing additional evidence. Over an eight-month period, with support from Project Evident, City Schools engaged in over 100 meetings to gather feedback from students, parents, school staff, alumni, community members, and elected officials. This feedback ranged from the specific programs a school needs to better support its students to the values the community felt were most important for a career readiness program. They then created seven different program placement scenarios based on a combination of facility conditions and size, student access, human resource allocations, labor market demand, community feedback, and financial feasibility. And

City Schools developed a series of progress monitoring and accountability metrics to ensure the strategy is being implemented and City Schools is achieving its intended outcomes.

As a result of this additional work, City Schools developed a four-year career readiness strategic plan, “Career Readiness: A New Pathway Forward.”²² Supplementing the strategy is a four-year financial model to ensure resources were available to support implementation.

At the time of writing, City Schools and Project Evident are deep into implementation planning. A high-level implementation plan, which includes actions that need to be taken by human resources, facilities, finance, academics, and student supports, has been developed, and a series of cross-district planning and progress monitoring meetings is being planned to ensure the plan is executed as intended.

Finally, to ensure that City Schools has the capacity to continue to monitor its progress against its four-year plan, by the conclusion of the engagement, City Schools’ staff will have been trained on how to use an action planning template and will have integrated this into its daily work. Project Evident also will transfer its analytic code and final data files for City Schools to use and replicate.

TRANSPARENCY AND STAKEHOLDER INPUT

The partnership experienced a few challenges, but one in particular could have set the progress back. As scenario planning and feasibility testing were being conducted, a key stakeholder was left out of the process regarding facilities planning. However, as partners had communicated at the outset to all stakeholders that nothing would be finalized until all voices were heard, the team was able to resolve this by quickly integrating previously excluded personnel into conversations and adjusting the plan based on their input.

This approach to transparency in decision making helped the district team navigate other political challenges and build trust, as they were able to show along the way how various stakeholder feedback had been incorporated into their final strategy. Various stakeholder groups, including staff whose positions may change or be eliminated, expressed gratitude for being able to be a part of the discussion. The political challenges are not over for the team, but they have built a lot of goodwill through this process.

Another challenge of this work was the data quality and infrastructure. It took a significant amount of time to understand the nuances of how school

data were recorded to be able to tease out data quality issues. However, additional team members from the research and evaluation side had first-hand knowledge and understanding of school systems data as well as CTE-specific data and indicators. This helped not only in making sense of the data; it also informed recommendations for how to best move forward. Rather than be derailed by data quality issues, the team prioritized building a stronger infrastructure that would allow City Schools to better track outcomes, monitor implementation, and pivot when needed.

RESULTS

As a result of this partnership, City Schools has created a four-year career readiness plan that aims to achieve its four goals. To strengthen rigor and relevance, the plan calls for increasing the number of in-demand living wage seats from approximately 3,800 to 7,950 by the end of the four-year plan, and growing the number of programs that put students on a path to in-demand occupations. It also entails strengthening partnerships with workforce organizations and creating greater alignment with college readiness efforts, including career-specific certifications and dual-enrollment opportunities. And to increase equity, the plan calls for relocating or adding programs across the city to ensure a more equitable distribution.

More immediately, the partnership has resulted in the reallocation of approximately \$1 million in SY2020–2021 to bolster the equipment, materials, and curricular resources available to students and teachers in high-demand, high-wage pathways. During this same year, SY2020–2021, City Schools reduced redundancy in its workforce to create more programmatic efficiencies while simultaneously allocating additional teachers to schools where there is demonstrated student demand. For SY2021–2022, City Schools will be redesigning five curricular pathways to better align with industry demands and expanding career readiness opportunities to additional students. An outline of its implementation plan for SY2021–2022 can be found in “Career Readiness: A New Pathway Forward.”

REFLECTIONS

The most unique and powerful parts of this engagement were the scenario planning and implementation support that was aligned to the district’s timeline. Often, research stops at the foundational analysis and recommendation

stage without moving into actionable steps and support, which makes it difficult for practitioners to understand the critical path to move forward. Additionally, by conducting research on the district’s timeline rather than on the researcher’s timeline made it actionable—key decisions were made in the first few months around resource allocation and budget that enabled future work.

The work done by City Schools and Project Evident is a good illustration of a “Next Generation” partnership. The practitioner-centric engagement was designed around the needs and timelines of City Schools. The work took an R&D approach through the iterative use of multiple data points to support decision making and by understanding that flexibility and a willingness to pivot when required are key. And the engagement intentionally involved communities throughout the process, recognizing that students, families, and teachers hold the most knowledge about what is working and what isn’t in their education system.

RESOURCES AND FURTHER READING

A copy of the district’s career readiness plan can be found at www.baltimorecityschools.org/sites/default/files/2021-03/CTE-StrategicPlanAppendices.pdf.

Additional resources related to this project include:

Baltimore’s Promise. “Gaining Traction after High School Graduation: Understanding the Post-Secondary Pathways for Baltimore’s Youth.” 2018.

ESG. “Preparing All Students for Economic & Career Success: An External Assessment of Career Readiness Priorities, Practices, and Programs in Baltimore City Schools.” Education Strategy Group. 2019.

Glasmeier, Amy K. “Living Wage Calculator.” Massachusetts Institute of Technology. 2020. livingwage.mit.edu. 2020.

Schoenberg, Corrie, Danielle Staton, Sadie Baker, and Sydney Short. “Broken Pathways: The Cracks in Career and Technical Education in Baltimore City Public Schools.” Fund for Educational Excellence. 2019.

NOTES

1. See “Career Readiness: A New Pathway Forward,” Baltimore City Public Schools, March 2021, www.baltimorecityschools.org/sites/default/files/2021-03/CTE-StrategicPlanAppendices.pdf.

2. See [https://go.boarddocs.com/mabe/bcps/Board.nsf/files/BYTKY453BEC1/\\$file/BCPS%20CTE%20Strategic%20Plan%20with%20Appendices.pdf](https://go.boarddocs.com/mabe/bcps/Board.nsf/files/BYTKY453BEC1/$file/BCPS%20CTE%20Strategic%20Plan%20with%20Appendices.pdf).