Preparing students for real-world design and engineering jobs

Meeting tough challenges while elevating student skills

Chester Upland School District selects Chromebooks and itopia to help educators creatively teach while facing real-world impacts.

Why Chromebooks?

- Google for Education Chromebooks, itopia Labs, and Adobe Creative Cloud provide CUSD students with powerful design tools for a pro-level experience.

- Educators are giving Chromebooks and itopia to CUSD students to help them access the kinds of solutions that other school districts may already have.

- Educators and staff encounter fewer IT conflicts compared to other software solutions.

District facts (Public school district)

Total district enrollment

2,640 Students

600 Teachers and staff

Number of Schools

8 Total (1 high school on two campuses, 2 intermediate schools, and 4 elementary schools)

Grades Served

Early childhood - 12

Chromebooks in use

2,500

Chester Upland School District educators are committed to elevating students' skills to ensure their successful careers upon their graduation.

"The vision of the Chester Upland School District is for every student to graduate ready for college and/or a career in spite of any and all challenges," reads the district's vision statement.

However, the "any and all challenges" are many. The district is under financial receivership by the Pennsylvania Department of Education, so budgets are tight.

"In our district, setting up a technology lab could take two years," explains Allen Smith, a Career and Technical Education (CTE) engineering teacher.

CUSD is also designated as a "turnaround district" due to its low student academic achievement.

Though faced with these obstacles, Smith and his colleague, CTE teacher Caitlin Merto, started developing curriculum using Google for Education Chromebooks, itopia Labs, and Adobe Creative Cloud, which has inspired creative teaching for other educators with real-world impacts.

The search for powerful devices that offer students more flexibility

CUSD's CTE department offers programs in engineering, communications technology, and automotive technology, among others. Many students work on projects that give them real-life experience and students graduate with professional design portfolios that help them land their first job. However, several students didn't have home internet access when COVID began, and their devices didn't have the requirements needed to run tools like Creative Cloud.

Organization profile

The Chester Upland School District (CUSD) is a mid-sized, urban public school district in Delaware County, Pennsylvania that serves 2,640 students and 600 teachers and staff. Within the district's six square miles, CUSD operates:

1
high school on two campuses

2
intermediate schools

4
elementary schools

Google Workspace for Education

Google Classroom

Google Drive

Google Forms

Google Docs

Google Sheets

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>
> Allen Smith, Career and Technical Education (CTE) Engineering teacher, CUSD

Design solutions for real-world projects– powered by Chromebooks

The combination of Chromebooks and itopia gives Smith's students a pro-level experience of design tools that enables them to be even more prepared to take on design tasks at the college level, or in their first jobs out of high school.

"I want my students to experience a real day on the job," Smith says. "Because of Google and itopia, in the STEM Academy right now, I can mimic real engineering-firm projects. When we fired up Autodesk's AutoCAD program on Chromebooks and itopia, I saw no latency, even when I threw every task at it. That's amazing to me."

> **Technology helps us to exploit the gaps of resources that we have in our district,"**
>
> Allen Smith, Career and Technical Education (CTE) Engineering teacher, CUSD

Students gain confidence when they can tackle real projects under the guidance of educators, like design requests from the Chester chapter of the NAACP.

"If a job comes into our studio, [students] know the process to go through in order to gather the information – like doing the appropriate research, design, and providing the end results to the client," Merto says. "So we're using Adobe, itopia, and Chromebooks not only to make sure students can do the items on the CTE task list, but also to open ourselves up to helping our community."

Using Chromebook and itopia also reduces the number of IT conflicts that educators and staff go through on a daily basis.

"With our Mac lab, we have to engage IT even for minor issues – like doing a factory reset on computers," Merto says. "The support from itopia also gives us more time to spend with students, since we don't need to spend time troubleshooting the solution."