Case study

Fargo Public Schools

K-12 district taps HP PC portfolio to transform classroom experience

Industry
K-12 Education

Objective
Leverage educational technologies to support modern learning and productivity

Approach
Articulate instructional goals, then select student and staff computing devices that meet academic, technical, and financial criteria

IT matters
- Provide 1:1 notebook PCs to 5,775 middle and high school students
- Equip STEM labs with high-performance workstations
- Deploy Chromebooks in elementary schools
- Equip teachers, counselors, and administrators with notebook PCs

Business matters
- Empower students, parents, teachers, and staff to support personalized learning
- Graduate students with skills necessary for higher education or skilled careers
- Deliver motivating, interactive, relevant classroom experiences
- Meet budgeting criteria to ensure sustainable use of technology

"Students today need interactive, interesting content— and the things they learn need to be relevant in practical ways. Technology tools like the HP Stream are not a luxury; they are a necessity."

– Bill Westrick, IT Director, Fargo Public Schools

Fargo Public Schools is the second-largest school district in North Dakota, serving 11,174 students. Committed to empowering every student with the skills necessary to continue their education or begin skilled careers, Fargo uses technology strategically to improve and individualize learning. A tour through the district's 16 elementary schools, three middle schools, and four high schools shows the plan in action—and also reveals how Fargo is leveraging a strategically selected range of HP computing devices, from HP Stream Pro Notebooks in its 1:1 PC program to powerful HP Z Workstations in science labs.

> "I'm thankful to HP as a vendor that they have such a wide range of devices. There really isn't another vendor that will take us all the way across the technologies we use."
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> — Bill Westrick, IT Director, Fargo Public Schools

In its recently updated five-year technology plan, Fargo Public Schools articulates not only its strategic technology vision but also the action items to achieve particular goals. Technology and the Internet have changed how information is created, accessed, and communicated, the plan states; therefore, information literacy must be infused into the daily classroom experience. "Personalized learning and 21st century skills—communication, collaboration, critical thinking, and creativity—are major trends in K–12 education today," says Bill Westrick, IT director of Fargo Public Schools. "Kids today are in a different place than they were 30 or even 10 years ago. They need more interactive, more interesting content—and they expect the things they learn to be relevant in practical ways. In this context, technology tools are no longer a luxury. They are a necessity."

Technology planning always starts with instructional goals

It's a natural tendency for people in any K–12 technology task force to jump first to the question of what hardware devices to select, Westrick says. The key to Fargo's successful use of technology, however, is to never start the discussion there. Rather, the district first clarifies the purposes technology needs to serve. "The conversation always starts with, 'Where are we at today? What are the problems we're trying to solve? What are our instructional goals?' Once we agree on those primary things, then we start looking at the device landscape to see what's available matching our needs and budget."

Another thing Fargo does at this stage is involve all stakeholders in the planning process, including teachers, students, administrators, parents, and instructional design experts. "It goes a lot better when you involve the people who are affected by the decisions," says Liz Thompson, IT lead support at Fargo Public Schools.

Strategically guided device selection empowers students and staff

This purpose-driven approach has led to a strategic mix of HP technologies at Fargo Public Schools. All students in grades 6-12 are assigned an HP Stream Notebook. In the middle schools, these devices stay in classroom carts but are assigned to individual students during class. High school students may take their notebooks home. The HP Stream Pro is an affordable yet fully functional Windows 10 device whose long battery life allows students to charge overnight and leave their power cables at home during the day. "Ensuring that all students are working with the same, reliable technology has allowed our teachers to create lesson plans that use electronic resources," Westrick says. "Students can access their lessons and homework online, collaborate together in Google™ Apps, and submit their completed work through Google Classroom or Moodle." For the minority of students who don't already have Internet access at home, Fargo has partnered with the community to provide access for qualifying families.

For extra computing power in science, technology, engineering, arts, and math (STEAM) classrooms, Fargo deploys HP Z Workstations and HP Z Mobile Workstations. In elementary school grades 3-5, the district uses HP Chromebooks in small-group settings; with their quick startup and easy access, the devices enable teachers to enhance lessons with electronic resources. The affordability of the HP Streams and HP Chromebooks allows Fargo to refresh the devices every three or four years. Having both Chromebook and Windows devices enables the district to leverage both Google Apps for Education and Microsoft® Office 365. Currently, Google G Suite is Fargo's main instructional platform, while Office 365 is used mostly for staff communication and collaboration.

Fargo's staff of 1,800 includes 1,072 teachers, counselors, and principals; 64% of district teachers hold master's degrees or higher. Some administrative staff use HP Desktop PCs. Many teachers and others whose work involves moving about are equipped with HP EliteBook Notebook PCs or HP EliteBook Revolve Notebook PCs. "Our teachers are often on the move, and having a lightweight laptop with daylong battery life is a necessity in modern instruction," Westrick says. Also a necessity are robust professional development opportunities for teachers to learn new ways to integrate technology into the classroom. Fargo teachers participate in workshops and online communities, and receive support from instructional technology coaches in middle and high schools.

Customer at a glance

Application

K-12 education leveraging electronic course content and collaboration tools

Hardware

- HP Stream 11 Pro Notebook
- HP Chromebook
- HP Z Workstation
- HP EliteBook Notebook PC
- HP EliteBook Revolve Notebook PC
- HP Desktop PC

Services

- HP Care Pack 3 year Next Business Day Onsite Service

HP relationship ecosystem delivers value

With the diverse range of HP solutions deployed at Fargo Public Schools—including more than 300 networked HP printers—value comes to the district not only through the portfolio breadth but also through the entire relationship. Westrick says his HP representative works diligently to inform the district of new solutions and services, provide demonstration units, and offer access to subject matter experts. With certified technicians on staff, Fargo conducts some self-maintenance on its HP devices. HP Partner Corporate Technologies provides supplemental HP Care Pack 3 year Next Business Day Onsite service for the HP Streams. Another HP Partner, Riverside Technologies, provides imaging and asset tagging services, as well as green delivery consolidating shipments to reduce packaging waste. With its 1:1 program replacing devices for two grade levels each year, the district has approximately 1,700 new laptops arriving each summer. Fargo also refreshes approximately 300 staff computers a year. "We depend on Riverside Technologies to prepare our new devices for quick deployment when school is back in session," Westrick says.

Transforming education to deliver metrics that matter

To illustrate the profound impact technology has on education, Westrick traces the changes he's seen over the past decade. Ten years ago, he says, technology was a destination; students were taken from their normal classrooms to fixed labs for specialized lessons that had to be completed within the assigned time available on the lab schedule. Next came mobile carts of laptops, which made it possible to bring technology into the classroom but still posed issues with battery life and resource sharing. In the modern environment, having 1:1 devices in the hands of each student, with battery life to make it through the class day, is transforming instruction from traditional "stand and deliver"

lectures to collaborative learning. "Teachers today interact with students on lessons that are more like work projects," Westrick says. "In some cases, teachers have developed and posted lesson videos to 'flip' their classrooms, allowing students to learn via video at night and ask questions and work on projects during class time."

> "One of the things that makes the technology piece successful at Fargo is having all our stakeholders—the people who are affected by decisions—give input and work together."
>
> – Liz Thompson, IT Lead Support, Fargo Public Schools

A cornerstone of Fargo's technology plan is to "measure what matters"—that is, to gauge student achievement of learning targets so that strengths and weaknesses can be detected quickly enough to support individualized performance improvements. Every year, Fargo also surveys students on their technology use—learning, for example, whether their devices work reliably, whether students bring them to school every day and use them. What captures Westrick's attention most is the survey's "comments" section, where students describe the impact of technology in their own words. Gone are the days when students didn't see value in their classroom technology. Nowadays, he continually hears that it's an essential tool. "We know things are getting better and better every year," Westrick says. "Technology isn't an add-on anymore. It's integral to lifelong learning. I'm thankful to HP as a vendor that they have such a wide range of devices. There really isn't another vendor that will take us all the way across the technologies we use."

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