

Kershaw County School District's students engage in active learning thanks to professional development, financing and technology from HP



“Thanks to HP’s understanding of what it takes to be successful in education, our 1:1 i-CAN program has had a fabulous start... It has transformed the way our faculty teaches – it encourages creativity, and assignments are more rigorous and more relevant to what a student will encounter in life. Kids have moved from being passive receivers of information to being actively engaged in projects. Students who leave Kershaw County School District are going to be able to compete with anyone worldwide to be successful in post-secondary education and the workplace.”

– Dr. Agnes Slayman, Assistant Superintendent for Curriculum and Instruction, Kershaw County School District

## Kershaw County School District





Kershaw County School District (KCSD), located in Camden, South Carolina, is responsible for the education of 9,945 students across 20 school campuses. Its guiding principle is 'to prepare students to excel and contribute as productive and responsible citizens in a global society by ensuring innovative and challenging learning experiences.' To support this mission, it recently undertook an enormous overhaul of its technology infrastructure.

Dr. Agnes Slayman, KCSD's Assistant Superintendent for Curriculum and Instruction, described, "In our high schools, the PCs had typically been used to teach keyboarding skills, and in the elementary schools, the devices were mainly used to run remediation software programs to support students who needed additional help. However, we wanted to widely implant the use of technology across all of our courses and programs to encourage greater collaboration and critical thinking from students. We also wanted to more flexibly support the wide range of learning styles that make KCSD an effective interactive school setting."

Ten years previously, KCSD had implemented desktop PCs in the schools. However, a decrease in funding, due to the U.S. economic recession, caused updates to technology to be cancelled and the equipment became outdated. Dr. Slayman noted, "It was frustrating and inefficient to be working with such antiquated equipment."

#### **Embedding technology in classroom instruction**

Wanting to cultivate students' capabilities with technology to enable them to compete with peers nationally, KCSD set about looking for a way to restructure its finances, technology, and curriculum to transform teaching and learning to meet this goal. Superintendent Dr. Herb Berg and the Kershaw County School Board communicated the vision of transforming teaching and learning in Kershaw County through the use of technology. "We needed to move away from installing devices with the hope that they would be used. Our goal was to deploy a solution that would be so embedded with classroom instruction that

it's an integral part of a child's life, just like a text book," explained Dr. Slayman. "We had to examine the way we acquired equipment because we determined that the historical process of purchasing technology outright left us with aging devices that we couldn't afford to dispose of, or replace four years later."

Many of the children in the Kershaw County School District didn't have access to technology outside of school, which Dr. Slayman saw as something that needed to be taken into consideration when implementing a new solution. She noted, "At a basic level, we wanted parents to be able to check on their kid's progress and support the school assignments. As educators, we always seek to establish closer ties with the residential population of Kershaw County, so we added the criteria that any new technological solution should in some way also embrace our community."

#### **Transforming an educational environment**

KCSD started by inviting five technology vendors to make recommendations, and HP was one of the invitees. "We didn't want to issue a formal proposal; instead we asked the vendors to describe how to transform our educational environment with 'cutting edge' technology that would both increase student achievement, and have children become active learners in the classroom," recalled Dr. Slayman.

The evaluation of the vendors took six months. "HP came up with what we believed was the most comprehensive solution that addressed teacher training, finance and new technology. It recommended that we deploy laptop PCs on a one-to-one basis to give every child optimal access to technology. Not only did HP's proposal cover the implementation of reliable equipment on a lease contract with built-in refresh, but it most critically included a strong professional development component to equip our teachers with the knowledge to integrate the use of technology in teaching," Dr. Slayman reflected.

### **Embracing technology in curricula**

Recognizing that professional development is critical to the success of KCSD's goals, HP teamed up with Classroom Connect, an educational technology division of Harcourt Education, to send trainers on-site to work with the high school teachers and administrators. Classroom Connect provided comprehensive workshops to integrate technology in classroom instruction, mentoring for teachers, and an ongoing series of seminars for school leaders and administrators.

**“Everybody was affected by this program, including special education and at-risk students. Our HP solution has positively impacted most parts of the school district’s structure in the way in which we conduct teaching and learning.”** – Dr. Slayman, Assistant Superintendent for Curriculum and Instruction, Kershaw County School District

Dr. Slayman observed, “HP and Classroom Connect performed a pre-assessment of our teachers for their skill levels and grouped them accordingly. The top group was identified to become mentors, and a total of 140 staff received training. The instruction started with basic hardware orientation, and then it moved into the integration of technology with the content. Faculty learned how to develop lesson plans using the technology, how to manage the equipment in the classroom, how to monitor student use in the classroom, and how to leverage online resources.”

KCSD sees staff development as an ongoing and continuous process, so Classroom Connect will return on a regular basis to observe and make recommendations to help improve the experiences with technology.

### **The financial restructure**

HP Financial Services worked out a lease agreement so KCSD could get state-of-the-art equipment – laptops, servers, networking, etc. – every year. KCSD also selected a four-year warranty option on all devices to eliminate the need to budget for repairs. Dr. Slayman noted, “By leasing the equipment, our budget became predictable and manageable. And, because the equipment is on a four-year lease, we’re able to avoid the obsolescence issues that plagued us in the past.”

“In our implementation of the laptop PCs, which we called our ‘1:1 i-CAN program’, we started with the ninth grade students. Each subsequent year's ninth grade will be equipped with the latest technology, and eventually all of our high school students will have a laptop PC that's no more than four years old,” explained Dr. Slayman.

### **A new infrastructure**

While the financing and training were getting underway, experts from HP performed an analysis of the legacy environment, architected a new design, and implemented necessary changes in the infrastructure. New devices went beyond PCs and encompassed HP ProCurve switches

– models 5304XLs, 2626s, and 2650s – and HP ProLiant servers – models ML370 G3s, ML350 G3s and DL380s.

Over a three-month period, five campuses were configured to accommodate campus-wide and common-area wireless environments. An HP project manager worked with Dr. Slayman and her staff to ensure that all components were installed without incident, and the infrastructure was upgraded outside of school hours, avoiding any disruption to students and the learning environment.

“We relied heavily on HP’s recommendation to help us deploy a laptop that would meet our needs for performance, weight and reliability. Our selection of the HP Compaq nx5000 notebook PC was based on all of these aspects and in particular, its durability to withstand the classroom environment as well as being transported to and from home,” said Dr. Slayman.

KCSD purchased extra batteries for the notebook PCs, and implemented battery re-charging stations in its media centers. It also deployed additional laptops in each of the media centers for use by those grades outside of ninth. Special software was installed on the notebook PCs for theft protection, and other software is used to help keep students out of inappropriate web sites and chat rooms. Finally, KCSD has centralized functionality to enable the automatic rollout of software updates to all of the laptops when they connect with the school district’s wireless network.

In addition to the laptops, faculty also was equipped with HP Photosmart M307 Digital Cameras and HP vp6111 projectors. To ensure that HP technology solutions are running optimally at all times, all high schools have an on-site HP technician. Dr. Slayman said, “At the district level, we have matched HP’s commitment to our success by implementing an instructional technology coach within each high school. That person demonstrates lesson plans, helps faculty leverage the technology further, and sustains the momentum towards entrenching the use of technology throughout the curricula.”

### **Successfully motivating students to learn more**

Wanting to be able to measure and demonstrate the success of the 1:1 i-CAN program, KCSD performed an assessment of the students and teachers – before starting the rollout of training and new technology – to provide a baseline. The school district studied the frequency with which PCs were being used in classrooms, competency levels, frequency and ease of communication between home and school, and parents’ skill levels. It also looked at grades, attendance rates, dynamics in the classroom, and level of positive engagement during instruction.

In January 2005, 815 ninth graders received the HP Compaq nx5000 notebook PCs for the first time. Dr. Slayman reported, “Three amazing things have already happened since issuing laptops to the students. First, the same day that the kids received their machines and completed the basic training, they returned to the classrooms and engaged immediately in PC-based lessons, because the

## At a glance

- **Organization:** Kershaw County School District
- **Location:** Camden, South Carolina
- **Size:** 9,945 students at 20 school sites
- **Telephone:** 803-432-8416
- **URL:** [www.kershaw.k12.sc.us](http://www.kershaw.k12.sc.us)
- **Primary focus:** To prepare students to excel and contribute as productive and responsible citizens in a global society by ensuring innovative and challenging learning experiences.

## At a glance

- **Partner:** Classroom Connect
- **Location:** Brisbane, California
- **Founded:** 1994
- **Telephone:** 650-351-5100
- **URL:** [corporate.classroom.com](http://corporate.classroom.com)
- **Primary services:** High quality professional development programs and online instructional materials to meet the changing needs of K-12 school districts nationwide.

teachers felt comfortable and confident with the technology. Second, the equipment 'leveled the playing field' between regular students and special needs individuals giving them a similar range of skills on the PCs. Third, it also brought about equality from a socio-economic perspective – everyone has the same equipment regardless of parental income, and all ninth graders have the tools to complete assignments."

Today, all of the equipment is in wide use and shortly KCSD will be in a position to perform its first assessment against the baseline data. Dr. Slayman enthused, "Everybody was affected by this program, including special education and at-risk students. Our HP solution has positively impacted most parts of the school district's structure in the way in which we conduct teaching and learning. The 1:1 i-CAN program already has improved communication enormously. Learning is now more group and project oriented, so students use the cameras to pictorially document steps that occur in projects outside of the classroom. They create their own presentations and incorporate photos. With the wireless infrastructure, we are no longer constrained by concrete walls."

She continued, "We recently deployed a secure web site, which contains details about lesson plans, tests, and

homework, so that parents can stay involved. Soon even students' grades will be posted for families to review. One of the best things is that HP worked with us to provide our local community – residents of Kershaw County – with the option to order the same equipment as we have – including PCs, laptops, projectors, and cameras – from our web site for their home. It helps to build consensus and support for what we are doing, and the equipment is very competitively priced for our community. There's already been great interest from our parents and community in this."

Dr. Slayman concluded, "Thanks to HP's understanding of what it takes to be successful in education, our 1:1 i-CAN program has had a fabulous start. Technology is driving students to want to learn more. Children that were previously disinterested in school are now active participants in the classroom. It has transformed the way our faculty teaches – it is more creative, and assignments are more rigorous and more relevant to what a student will encounter in life. Kids have moved from being passive receivers of information to being actively engaged in projects. Students who leave Kershaw County School District are going to be able to compete with anyone worldwide to be successful in post-secondary education and the workplace."

## Challenges

- Finding resources to transform teaching and learning to cultivate students' capabilities with technology, enabling them to compete with other students nationally for job positions.
- Restructuring financing for technology purchases.
- Establishing closer ties with the residential community of Kershaw County.

## Solution

- Professional development from Classroom Connect
- HP Financial Services leasing agreement
- HP Consulting expertise
- HP Compaq nx5000 notebook PCs
- HP Compaq nx5000 laptops with additional battery packs
- HP Photosmart M307 Digital Cameras
- HP vp6111 Projectors
- HP ProCurve switches
- HP ProLiant servers

## Results

- Classroom assignments more rigorous and relevant.
- Learning is more group and project oriented.
- Students are actively engaged in projects.
- Regular students and special needs individuals have a similar range of skills on the PCs.
- Socio-economic equality.
- KCSD's students will be able to compete with peers worldwide.
- KCSD has connected with the residents of Kershaw County.
- Lease agreement facilitates continual access to the latest technology.
- Budget is now able to embrace all technical objectives of KCSD.

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