The Computerworld Honors Program

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Final Copy of Case Study

Status:
Laureate

Year:
2013

Organization Name:
Samsung Electronics America

Organization URL:
www.samsung.com/business

Project Name:
Samsung Smart School Solution Multiplies Success for Geeter Middle School Math Students

Please select the category in which you are submitting your entry:
Mobile Access

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

Geeter Middle School in Memphis, Tennessee, was looking to improve its students' academic performance and spur an interest in learning, specifically among its sixth- to eighth-grade students. The school had experimented with using apps on tablet PCs, but the technology did not provide an integrated learning platform or data to substantiate improvements in student performance. In a time of tight education funding, the school wanted an interactive 1:1 computing solution that provided a demonstrable benefit. Geeter wanted to both improve the academic performance of their students and boost their enthusiasm for learning. It was also important that Geeter be able to quantify how any new teaching approaches improved academic improvement. The school system had previously administered a project where students used apps on a tablet computer, but could not collect the back-end data. The new solution would need to not only lead to academic improvement, but isolate the impact of the technology's contribution toward student improvement. In September 2012, the sixth grade math class at Geeter was

provided with a Samsung Smart School Solution package, which consisted of 35 GALAXY Note 10.1 tablets, a 65-inch interactive whiteboard, and a wireless printer. The school was the first educational institution in the United States to pilot the solution, which has previously shown success in improving student performance in South Korean classrooms. Each student in the class was provided with a GALAXY Note 10.1 tablet and keyboard docking station at their desk. The instructor also uses a tablet and can present to the students on an interactive whiteboard at the front of the classroom.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

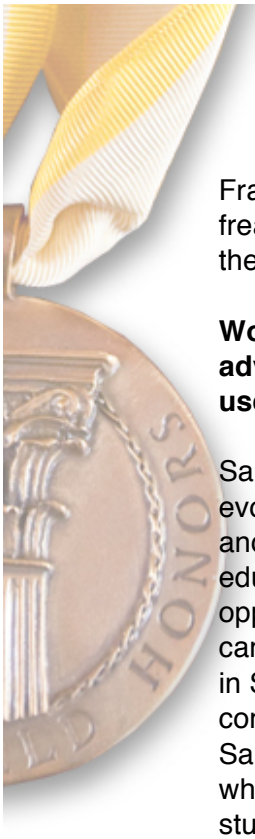
The project was implemented in September 2012. Samsung is in the process of rolling out its second pilot for Smart School Solution, due largely to the overwhelming success of the Geeter Middle School implementation.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

Project implementation is complete; however, Geeter Middle School is continuing to track the use of this technology in the classroom. The teacher is able to monitor in real-time how students are progressing so they can continue to customize their instruction. They're also collecting back-end data on the students' use of the technology so they can isolate the impact of the technology's contribution towards academic improvement. In addition, Samsung continues to provide support for the technology and collect feedback to further enhance the Smart School Solution for future implementation and use.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

"Students at Geeter Middle School embraced the Samsung Smart School Solution immediately," said Cleon L. Franklin, director of the school district's Office of Instructional Technology for Memphis City Schools. For example, two Spanish-speaking students quickly figured out how to change the language settings on the systems before that was explained to them. "As adults we are sometimes threatened by new things. With the students, all we needed to do was get out of the way." The system also enabled teachers to monitor the students' progress as they were learning and do real-time coaching. Teachers were able get feedback right away and could tell if the students didn't grasp the concept or needed to revisit it. With this up-to-the-second insight, Geeter can carefully track the performance of each student and customize instruction. "The system allows the teacher to separate the classroom into groups of advanced students and those who need extra help," Franklin said. "They can differentiate which activities they give to each, and then hone onto an individual student's device to see if they're on track." And because the system tracks how students are using the technology, the school is gathering data it will be able to tie directly to performance improvements. Further, the technology eliminated the stigma of asking questions in class because the "gamification" made learning fun and cool. "I walked into a classroom where children had severe issues the year before, and now they were genuinely excited about math,"



Franklin said. "Math anxiety is a common problem for the best of us. Students would freak out and think, don't call on me." With the system, we had the opposite reaction; they were eager to do the work."

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

Samsung understands the potential of technology and is committed to continuing to evolve its Smart School Solution to help schools and districts realize greater efficiencies and value from their technology investments. The technology and tools transform the education process, allowing teachers to become a facilitator and collaborator, as opposed to just being a lecturer standing in front of the class. What's more, the solution can easily be adopted by and tailored for other schools. It has been deployed at schools in South Korea and elsewhere, with research showing improvements in class convenience, student engagement and lesson comprehension. Key elements of the Samsung Smart School Solution platform include: The Interactive Management Solution, which lets teachers easily deliver content to students, share their own or an individual student's screen with the class, and monitor student progress in real time. Instructors can conduct group activities, Q&As, tests, or instant polls. When needed, teachers can instantly call the class to attention by locking student screens via voice command. The Learning Management System, which enables teachers to easily provide learning materials and information that students can access anytime. Teachers can post course materials, such as ebooks, learning apps, and timetables. They can also send school notices and news, as well as create forums for extracurricular activities, all of which helps to create a true e-school environment. The Student Information System enables teachers to track student attendance, general information, grade history, and prizes or demerit points. The Smart School Solution provides teachers with an integrated platform that also helps them administratively. Samsung understands the potential of technology, and we are committed to continuing to evolve the solution to help schools and districts realize greater efficiencies and value from their technology investments.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

The Samsung Smart School Solution was designed with the proliferation of mobile device use among students in mind. According to 2012 research conducted by Pew Research Center, 23% of teens ages 12-17 say they have a smartphone and 16% of teens have used a tablet computer to go online within the last 30 days. Further, IDC Government Insights noted that the widespread adoption of tablets, mobile applications, social networks and digital content has led students to expect more interaction via software and digital content as they learn. As students are increasingly using these mobile devices for learning, the Smart School Solution is designed to bring educational content to where their attention is focused. By bringing mobile technology into the classroom setting, students can continue the form of learning they're accustomed to and collaborate with their peers and teachers.