The School District of Clay County recognizes the responsibility and the challenges of transforming learning and teaching environments to meet the needs of 21st Century learners. Connectivity to high speed Internet is vital to this transformation and there are two Wireless pilot programs in progress to map the direction the District must follow. The two pilots began Spring 2010 and involve one junior high school, Green Cove Junior, and one high school, Oakleaf High School. Both pilots required the design and implementation of a wireless network that is accessible by all student devices that have Internet connectivity. This includes, but is not limited to, laptop computers, netbooks, iPads, IPod Touch, smartphones, and other similar devices.

As part of these pilots, Information Services has created a hybrid wireless environment that allows students to access the school district's filtered Internet connection. (Filtered access is a requirement of the Children's Internet Protection Act, CIPA.) This environment requires the district to invest more heavily in capacity, security, and bandwidth. Instructional Resources, Information Services and other Instructional Division departments have worked together to develop policies and procedures that allow students to bring and use their own technology.

If funded through EDU2011, the Leveraging Technology and Digital Equity pilots will be expanded to an outlying elementary, Clay Hill Elementary, that is located in an underserved community where no broadband capabilities exist.

Technical issues that have been encountered in the design and implementation of the wireless network include authentication protocols, filtering requirements, and accessibility in all campus areas. Others are expected as the pilot expands but the authentication, filtering and accessibility has been addressed in the following ways:

Training for administrators, librarians, teachers and students has been critical to the success of the initiatives. A team composed of district and site-based personnel including Information Services, Instructional Resources, Technology Integration Specialists, site administrators, media specialists (librarians), and network specialists developed guidelines, informational documents, and training for all stakeholders including parents. The pilot at one school was integrated with a Title II D STEM initiative to correlate the curriculum impact when wireless access is an available factor.

The School District of Clay County's Leveraging Technology Initiative develops a movement toward 1:1 computing. Though the District is unable to fund a 1:1 student computer ratio, allowing students to bring their own devices places the District in a better position to provide for students who do not already have access to digital devices. These devices may include laptops, cell phones, iTouch, Netbooks, or other such wireless technology devices that have sufficient capabilities to utilize district wide instructional resources.

The school district will continue to provide computers for students to use during the school day, and a Digital Equity Initiative will serve the neediest students by providing technology and training to students and their families.

Clay Hill Elementary has 68% of student eligible for free or reduced lunch and is eligible for the discount rate of 80%.

Costs associated with implementing the Clay Hill Wireless Program include the following:
- *Switch*
- *Access Points*
- *Labor*
- *Devices for Digital Equity, Teacher, Librarian, and student/parent training costs will be incurred by the District as part of the District's general budget and community partnerships.*
- *Off-premise connectivity is vital to this underserved community that currently has no availability of broadband. Students and parents cannot utilize resources available to other District students*

and parents because dial-up access cannot handle Flash and other bandwidth intensive applications that are part of most educational materials including online textbooks. Currently there are no other current or planned Wireless Programs that meet the needs outlined above. ATT does offer a tunnel solution but that would be fee based on the number of users. (current price?)

The District Technology Plan serves as the guiding document for technology planning and includes information on the Leveraging Technology and Digital Equity Initiatives.

If funded through EDU2011, the Clay Hill Elementary Wireless Program will allow only filtered access to the hybrid wireless environment. Users of the network are authenticated through login credentials and all have signed an Acceptable Use Policy entitled, Terms and Conditions for Use of Telecommunications and Networks. Users and parent(s) will also be required to sign a Protocol document prior to use of the network.

Clay Hill Elementary is a public school that is part of the School District of Clay County and is located at 6345 County Road 218 in Jacksonville, Florida. Though the school borders Duval County, its rural location has been identified by Internet providers as nonsufficient to support network expansion to the area. The school has approximately xxx staff members and serves approximately 520 students in grades K – 6.

Clay Digital Equity Initiative

The School District of Clay County **Digital Equity Initiative** serves the neediest students by providing technology and training to students and their families. Students in families that qualify for free lunch programs may apply to receive computers or another digital device through the *Digital Equity Initiative(DEI)*. As computers are refurbished and become available, families selected through a lottery system, will be able to purchase a computer another digital device for a nominal $25 fee. Computers will be furnished with a standard package and supplied through community donations and district surplus computers. Students in the SDCC Career and Technical Education program will be responsible for refurbishing the computers as part of their Computing Technology Industry Association (CompTIA) work. Computers will be warranted for 30 days. Miscellaneous expenses are funded through donation and/or grant sources only.

In order to receive the computer or another digital device, the student and a parent, guardian, or adult family member must attend a two-hour training session after selection through the lottery. At the training, the students learn with their families how to connect to the Internet and how to access and use District resources.

Leveraging Technology Initiative

The School District of Clay County's **Leveraging Technology Initiative** develops a movement toward 1:1 computing. Though the District is unable to fund a 1:1 student computer ratio, allowing students to bring their own devices places the District in a better position to provide for students who do not already have access to digital devices. These devices may include laptops, cell phones, iTouch, Netbooks, or other such wireless technology devices that have sufficient capabilities to utilize district wide instructional resources.

The school district will continue to provide computers for students to use during the school day, and a **Digital Equity Initiative** will serve the neediest students by providing technology and training to students and their families.

The *Leveraging Technology Initiative (LTI*) will begin with pilots at Green Cove Junior High and Oakleaf High School. During these pilots, Information Services will create a hybrid wireless environment that allows students to access the school district's filtered Internet connection. (Filtered access is a requirement of the Children's Internet Protection Act, CIPA.) This environment will require the district to invest more heavily in capacity, security, and bandwidth. Instructional Support Services will work with Information Services and other Instructional Division departments to develop policies and procedures that allow students to bring and use their own technology.