

2007

District Technology Assessment

“It’s
About
Kids”



Fayette County Public Schools
Department of Education Technology
June, 2007

Thanks to Rita Wimpy and her students at Millcreek Elementary for the use of their digital art for this cover.

Introduction

One of the recommendations of Fayette County Public Schools’ (FCPS) 2020 Vision initiative is to expand the district’s former “District Technology Assessment” (DTA), to include measures of district support mechanisms, basic infrastructure, and hardware concerns, as well as classroom practices. Previous DTAs have focused on teacher use, student use, and infrastructure. This document builds on the information from previous DTAs and includes the additional information recommended by 2020 Vision.

Education Week’s March, 2007 issue of “Technology Counts” lists some statistics on technology resources in each of the states and the nation as a whole. The following table shows key indicators for the nation and Kentucky from “Technology Counts” and how FCPS compares.

Indicator		Nation	Kentucky	Fayette County
Students per instructional computer		3.8	3.9	7.4 (5-years-old or less)
Standards for students include technology		48	Yes	Yes
Tests students on technology		4	Some districts	No
Standards for teachers include technology		45	Yes	Yes
Standards for administrators include technology		36	Yes	Yes
Offers computer-based assessments		23	Yes (special education)	Yes
Has a virtual school		23	Yes	Yes
Offers online professional development		39	Yes	Yes
Textbook adoption policy includes digital resources		17	Yes	Yes
Requires technology training or testing for recertification, or requires participation in technology-related professional development	Teachers	9	Yes	Yes
	Administrators	5	No	No

Kentucky fares well overall compared with other states, ranking 7th in the nation. Resources in Fayette County are similar to the rest of the state, at least in terms of these indicators. Areas in which the district falls short are testing students on technology, and administrator training. However, neither of those is widespread nationwide. We also fall short in terms of the ratio of students to computers. Part of the discrepancy may be explained by how we count computers.

One of the district goals is to only have computers that are 5-years-old or less. After 5 years, most computers are obsolete and they cannot be used as effectively for instruction or administration. Also, the cost to maintain them exceeds the value of the computers themselves. National and state figures do not take the 5-year limit into consideration, and we know that many school computers across the state and nation are older than that, so their ratios are deflated.

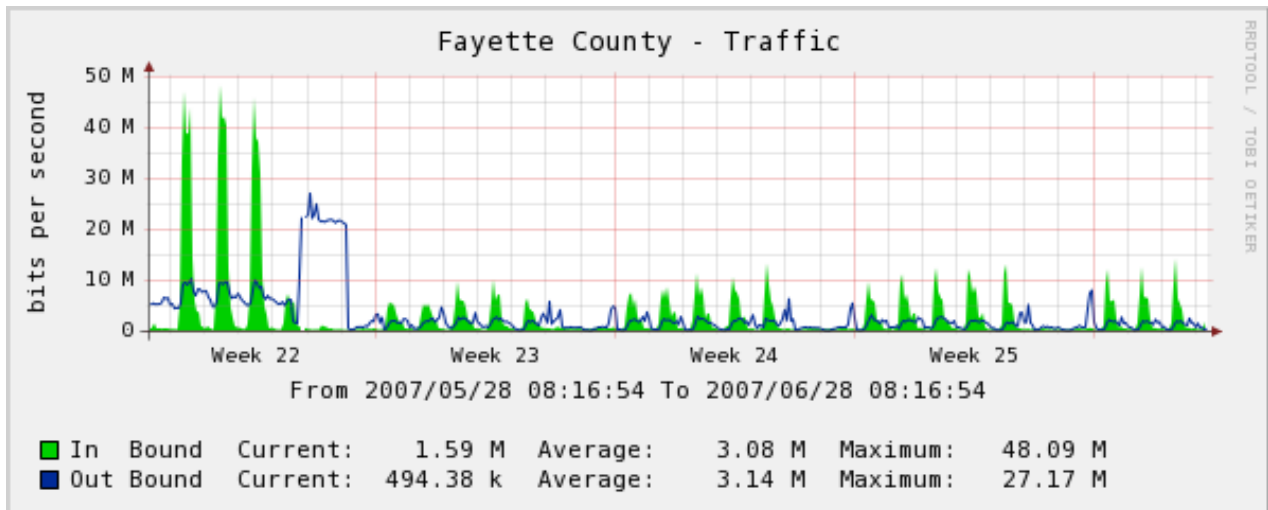
Infrastructure

Instructional Device Upgrade. The district maintains a computer inventory system to provide data for allocation of workstations to schools. The goals are to have (A) a 1:1 ratio for staff whose job requires PC usage, (B) a 6:1 student to computer ratio, and (C) all computers less than 5 years old. Goals A and B are established by KDE in their *2007-2012 Education Technology Master Plan*. Even though A and B are minimum ratios, KDE encourages districts to work toward a 3:1 student ratio in elementary schools and a 1:1 student ratio in middle and high schools. Goal C is a district goal, recommended by the 2020 Vision task force. During 2006/2007 FCPS received \$1,308,383.49 in Instructional Device Upgrade (IDU) funding from KDE that was used to purchase CPUs (no monitors) in support of the two minimum ratios above. We anticipate receiving a similar amount in 2007/2008. In order to maintain a 5 year replacement cycle the following budget impact will be felt:

	<i>Total Needed</i>	<i>2007/2008</i>	<i>2008/2009*</i>	<i>2009/2010*</i>	<i>2010/2011*</i>	<i>2011/2012*</i>																																			
Student Workstations 6:1	5424	2072	610	610	610	1522																																			
Staff Workstations	2268	348	397	340	285	898																																			
Total Units	7692	2420	1007	950	895	2420																																			
Total Cost		\$1,335,840.00	\$709,935.00	\$524,400.00	\$630,975.00	\$1,706,100.00																																			
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<i>All amounts from 2008-2009 on are unfunded at this time.</i>																																									

Currently we are at a 7.4:1 student to computer ratio when looking at computers 5 years old or newer. Any move toward a 3:1 student to computer ratio or a more aggressive 1:1 initiative would naturally increase the unfunded amounts considerably.

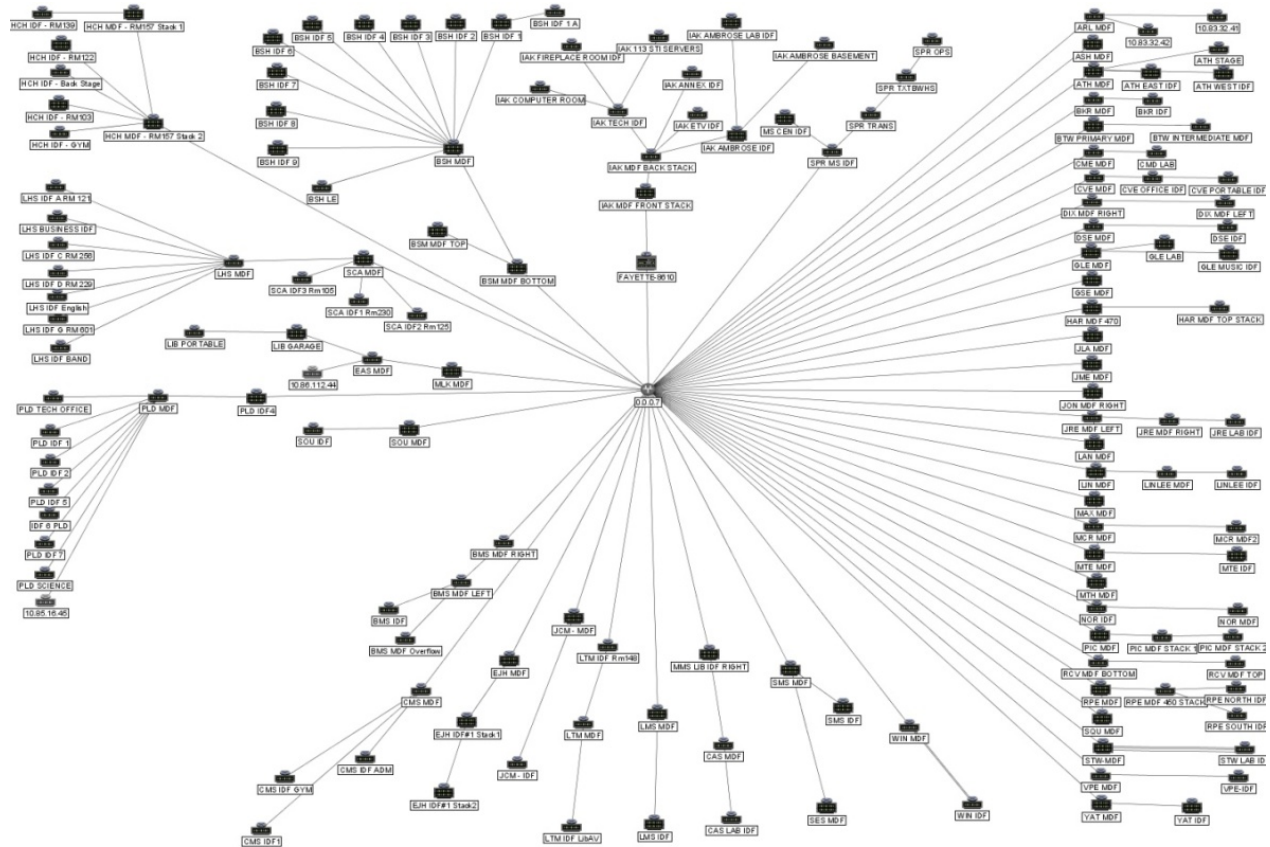
Kentucky Educational Network. In cooperation with KDE, FCPS has been added to the new Kentucky Education Network (KEN) via a 100Meg circuit. By regulation and design, KDE is the Internet service provider for all school districts in Kentucky. Our previous connection provided by KDE was a bundle of 8 T-1 circuits with a total of approximately 12Meg of Internet access bandwidth. Usage graphs indicated that during normal school hours we were using 100% of that capacity. Upon activation of our new KEN circuit in February, graphs indicated that we immediately began using between 25Meg and 30 Meg per day. Usage steadily grew for about 30 days and has stabilized between 38Meg and 45Meg (38%-45% of capacity) on a typical school day. (See graph below indicating the usage the last few days of school and the beginning of summer break). The new capacity has had a positive impact on student and staff satisfaction with Internet Access and has made possible activities like interactive video to remote sites. We anticipate usage will continue to increase as schools make more use of resources such as videoconferencing, webcasting, and streamed instructional media such as KET’s Encyclomedia.



District Fiber Network. In June 2005 FCPS advertised a bid for gigabit fiber services. The Board approved Insight Communications as the successful bidder in August 2005. A contract was finalized later that fall with an installation completion date of June 2007. As a result of excellent cooperation between Insight and FCPS we were able to complete installation by December 2006 with all schools online and using the new network.. The new network has made it possible to begin such projects such as server consolidation, centralized file storage, remote disaster recovery site, etc.

To date, network “up-time” has been far and away better than expected. Prior to switching to the new network it was not uncommon to have as many as 2 or 3 schools experiencing WAN

problems in any given week. That number is now more likely to be 1 every month or 6 weeks. The figure below illustrates a graphical representation of the district WAN.



Server Consolidation. In an effort to increase efficiency, reduce operating costs and provide more reliable service, the district has begun process of consolidating services. With the implementation of the gigabit fiber network we now have the bandwidth to move resources from individual schools and make them shared resources. The first target for this consolidation of services was Internet proxy and antivirus software dissemination. In the old configuration each school had a proxy server that served to cache Internet content. That server was also delivering antivirus software and updates to workstations. This school year all proxy servers have been decommissioned and all school and district Internet access is via a single central server. Additionally, all antivirus services have been moved to a dedicated single server for the entire district. See the chart below for other consolidation projects (completed and planned)

Server Consolidation	
2006-2007	2007-2008 (planned)
Proxy Services	Student Records Management (Infinite Campus)
Trend Antivirus	Student folder storage
Success Maker (instructional software)	Staff folder storage
Destiny (Library automation software)	
Windows Software Update Services	
Enterprise Read180 (Instructional software)	

Student Achievement

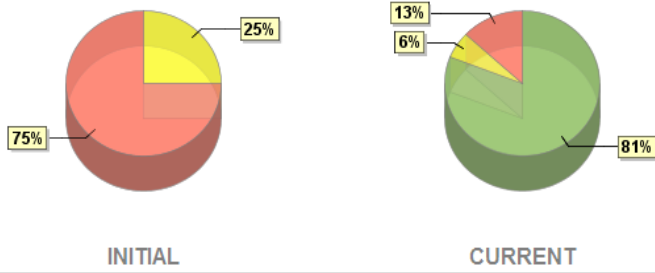
Previous DTA's indicated that technology has a positive impact on student achievement. Any shortcomings have been attributed to (A) aging computers and other hardware, (B) inadequate bandwidth to take advantage of high speed Internet capabilities, and (C) staffing levels that are below those recommended by professional education technology organizations. The district has made significant progress toward addressing A and B, and that has opened the door for us to begin seeing more improvements in student achievement.

Beginning in 2012, the state Board of Education will require all students to demonstrate technology competence before they graduate from high school. The U.S. Department of Education recommends that all students demonstrate technology proficiency by the end of 8th grade. While KDE and USDOE don't currently require a technology assessment, some districts in Kentucky and other states have already begun testing their students. Fayette County is not one of those, so we rely on indirect measures such as classroom observations, focus groups, and surveys, as well as data from specific instructional programs and activities. Previous indirect measures have shown that elementary schools tend to use technology more extensively, followed by middle schools and high schools. Even though the overall use of technology in high schools is comparatively low, the instances in which technology is used tend to be more sophisticated and challenging to students. Previous DTA data indicate that schools that have full-time or part-time technology resource teachers tend to use technology more extensively. Effective technology use should focus on (A) more active student engagement, (B) student-centered learning, and (C) greater depth of knowledge.

Data from specific instructional programs and activities

Reading Plus. Crawford Middle School piloted a program called Reading Plus in 2006/2007. Reading Plus is a web-based program that is meant to improve reading by strengthening students' visual, perceptual, and cognitive skills; leading to better silent reading fluency and comprehension. Students were pretested in January 2007 and post tested in May 2007. The charts below show how Crawford's Reading Plus students improved.

Reading Rate (Student Rates in Relation to Grade Level Norms)



	INITIAL	CURRENT
Below Norm	75% (12 Students)	13% (2 Students)
At Norm	25% (4 Students)	6% (1 Students)
Above Norm	0% (0 Students)	81% (13 Students)

Average Fluency Rate Gain: 91%

Reading Level (Student Content Levels in Relation to Grade Level)



	INITIAL	CURRENT
Below 5+ Levels	50% (8 Students)	6% (1 Students)
Below 2-4 Levels	50% (8 Students)	75% (12 Students)
Below 1 Level	0% (0 Students)	13% (2 Students)
At or Above Level	0% (0 Students)	6% (1 Students)

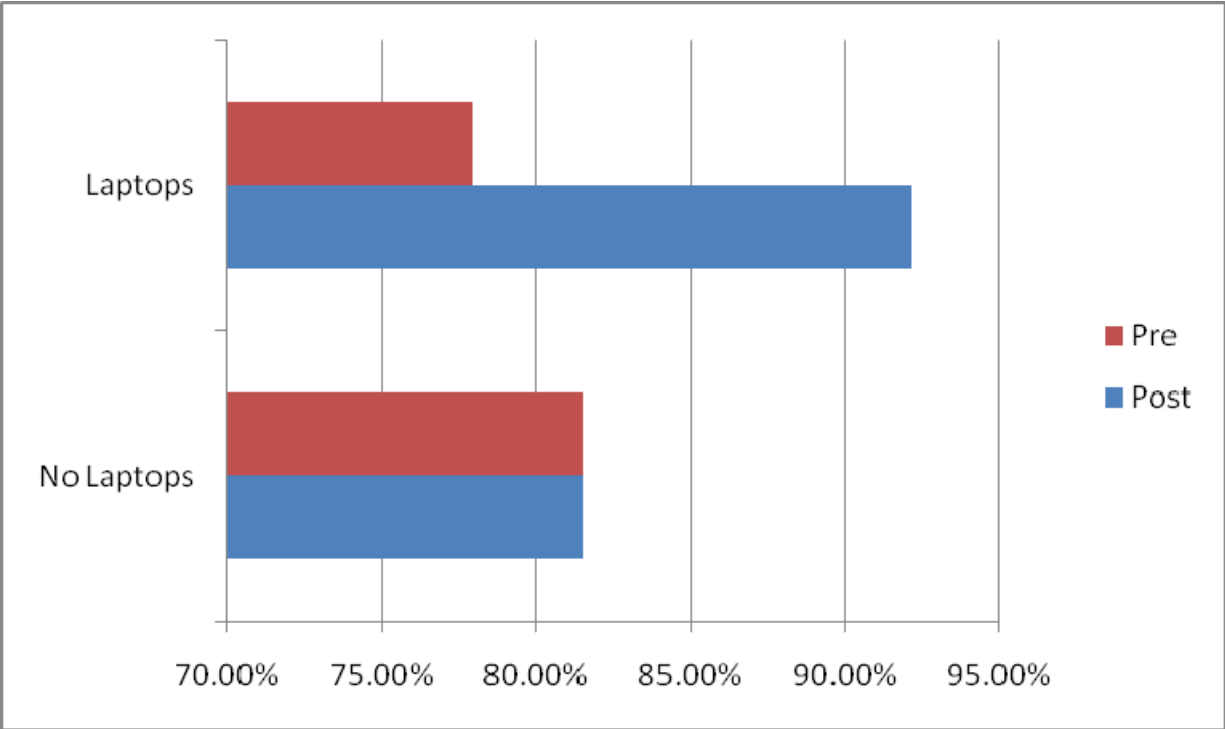
Average Level Gain: 2.3

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Students improved from 75% below norm on reading rate to 81% above norm. Crawford’s students also showed significant pre/post gains on the SRI, Stanford Diagnostic Reading Test, and PAS.

One-to-One Computers. SCAPA received a 2020 grant to purchase laptops for each of their 4th graders to use throughout the school day – similar to a 1:1 laptop initiative recommended in the 2020 Vision report and KDE’s *Education Technology Master Plan*. Students used their laptops throughout the school day. Prior to the 1:1 laptop program, SCAPA had a 38% proficiency gap in portfolio writing between males and females. That decreased to just 4% after students began using their laptops for writing. As shown in the chart below, the overall percent of students scoring proficient on their PAS reading test increased from 78% to 92.2% with laptops in 06/07, while there was no PAS reading improvement among students who did not use laptops during 05/06. There were similar improvements in math scores on the PAS.



SharePoint. SharePoint is a network-based resource that staff and students use for storing, managing, and sharing electronic documents and information. There are just fewer than 9,000 registered users, over 500 gigabytes of stored documents and other digital content in 900 SharePoint websites. Teachers use SharePoint for course management and sharing files with students and peers. Staff has access to district wide information such as the curriculum framework, projects, and committees. Individual schools have SharePoint sites that are used for within-school communication, calendars, curriculum development, grade level and content area communications, and a host of other uses. Schools may also use it to track progress on tasks such as computer support requests. SharePoint may be used to save copies of student work. For instance, Morton Middle 7th graders use SharePoint for storing all their portfolio pieces.

IMMEX. The district has a grant from the National Science Foundation, involving the development and use of online science lessons that are designed to improve students’ problem solving skills through the use of real-world science, technology, engineering, and math (STEM) simulations. Students have been working alongside their teachers to develop the simulations using a format called Interactive Multimedia Exercises (IMMEX) in collaboration with the UCLA College of Medicine. Comparing classes in which students used IMMEX vs. those that did not, we found a statistically significant difference between the two ($p < .05$). Students who used

IMMEX in their science classes outscored non-IMMEX students on KCCT by a significant margin. The following table shows the differences.

Comparison of Seventh Grade Student Science KCCT Performance for Students Using IMMEX in Class and Students Not Using IMMEX

Performance Level	Use IMMEX	No IMMEX
Novice Non-performing	0	1
Novice Medium	6	12
Novice High	78	150
Apprentice Low	31	50
Apprentice Medium	73	79
Apprentice High	62	65
Proficient	216	120
Distinguished	223	69
(blank)	51	49
Grand Total	740	595
Number Proficient or Distinguished	439	189
Percentage Proficient or Distinguished	59.32%	31.76%

SuccessMaker. Twenty-six elementary schools had SuccessMaker Math in 06/07. Below is a summary of the results from some of the SuccessMaker schools that run their program from a central fileserver. The developers of SuccessMaker recommend students using the program at least three times a week for 15 minutes each. That comes to 3 hours per month. The data below bears out the relationship between time spent and grade level gains. Schools that used the software the most made the largest gains.

School	Months of Usage	Average Grade Level Gain	Average Time Spent	Average Hours Per Month	Percent of Skills Mastered
ACE	8	1.05	22:14	2.78	96%
Arlington	8	1.03	25:55	3.25	94%
Dixie	6	0.39	8:01	1.33	66%
Garden Springs	8	0.36	9:42	1.22	95%
Linlee	7	0.36	9:32	1.36	72%
Southern	7	0.83	19:06	2.71	93%

The developers of SuccessMaker say that performance on their program can predict performance on state assessments with 80% accuracy. To test that, Harrison Elementary compared their SuccessMaker scores with scores of 3rd, 4th, and 5th graders on learning checks. Harrison students using SuccessMaker experienced 1 year growth in math from August to January, so you would expect them to have experience significant growth on learning checks. That proved to be the case for 4th and 5th graders, as shown in the table below. Harrison’s 3rd graders didn’t fare as well, but that was attributed to lack of open response readiness, and teachers instituted other strategies to help overcome that problem. Harrison also found SuccessMaker performance to be a good predictor of student performance on the PAS.

Grade Level	Test Session	Learning Checks	
		Academic Index	% Proficient or Distinguished
Third Grade	September	58.64	28%
	January	42.64	20%
	Overall Growth	16	-8%
Fourth Grade	September	43.21	11%
	January	92.55	78%
	Overall Growth	49.34	67%
Fifth Grade	September	40.09	9%
	January	83.88	60%
	Overall Growth	43.79	51%

Student Technology Leadership Program. The Student Technology Leadership Program had another successful year in 06/07 with active STLP programs in 51 schools in the district. Athens-Chilesburg, Clays Mill, Eastside, E.J. Hayes, Julius Marks, Lafayette, Millcreek, P.L. Dunbar, Southern Elementary, and Tates Creek Elementary all won statewide awards in 2007. STLP students at each of those schools have done outstanding work in 06/07. For example, here are some highlights from P.L. Dunbar’s program:

- Many STLP kids help prep for the start of school last year including connecting and ghosting labs (replicating the same software on each of the computers), connecting teacher stations and installing new software.

- STLP community service kids made regular visits to Garden Springs, Rosa Parks, James Lane Allen and Johnson Elementaries, as well as Beaumont Middle.
- PLD STLP students showed community leadership by jumping in to help get Bryan Station H.S. ready to open in January.
- PLD STLP hosted and did the tech support for FCPS tech fair.
- PLD STLP students were at school as early as the first week of summer to ask how they could assist in getting the technology up and running.

More telling than the awards and numbers are some of the personal stories about STLP students. Here's what one elementary STLP Coordinator wrote about a student in her award-winning group.

One of my little guys..., is living with his aunt right now because mom is in jail and dad is who-knows-where. This little guy has younger brothers who have been fostered out to other relatives and he never sees them. He worries about them, but never sees them. When he was in 3rd grade, the babies would be left home alone while he was at school. When he got home from school, he would ride his bike to the store and buy them a "Lunchable" or something else to eat! I'm telling you this, because as you can see, this student definitely had other things on his mind each and every day. Working with technology (video camera, digital still camera, Pinnacle, Power Point, Word, Internet) helped him stay focused on his school work. He e-mailed me just the other day and told me he is going to work hard to make sure he is successful in life. Made me want to cry... but he is a good guy, and he is great with technology! He needed something to focus on and worked with me every day before school and any time he could during the day!

School Websites. All schools have a website and those websites are getting a great deal of use. For example, Jessie Clark's website had over 61,000 hits between November 2006 and June 2007, and it has made teachers and staff more accessible to parents, students, community members, and even grandparents. Districtwide, there are 2,484 teacher webs.

MultiMedia. Teachers are incorporating more multimedia into their instruction. For instance, one teacher at Crawford Middle had her students use Windows MovieMaker to develop a documentary on the topic of their choice about the Civil War. Students did the research, wrote

and edited a script, gathered historical pictures, and added their own narration and music. Students collaborated with each other on their projects and came to school early to work on it.

Dixie Elementary had an Arts Enrichment Program. One of the activities was to pair 5th graders with 3rd graders and have them use a computer graphics program to develop images that were incorporated in a MovieMaker production. The teacher commented, "I hoped they would work well with the younger students and be willing to share their knowledge. They could not possibly have exceeded my expectations more. They were kind,



generous, helpful, caring and genuinely excited about working with the younger students. They patiently sat with them and explained how to download music, create pictures for the animations, make titles and credits and were complimentary when the students exhibited their finished products. The older and younger students became friends.... The older students matured as teachers and learners and it is an experience they will never forget." This picture shows two Dixie students working on their project.

Blogs. Schools are using the district's secure Blog system to enhance instruction. Tates Creek High School, for example, is using blogging to encourage summer reading and provide student interactivity on specific books. The blogs use the summer reading lists provided by language arts teachers for all four incoming grades.

Morning News. Many schools have their own morning news shows that are produced in the building and viewed in every classroom. Schools use those shows in place of morning announcements, and some schools incorporate instructional activities. For instance, Cassidy's special area teachers each take one day of the week and give a 2 to 3 minute mini-lesson covering vocabulary and a review of core content being covered that week. Students assist the teachers with their mini-lessons.

Videoconferencing and Webcasting. With the implementation of the district's high speed wide area network and Internet connection, schools now have access to more outside resources. French students at Tates Creek High School have connected to students in France using a live interactive videoconference. Several high schools have shared advanced classes with other schools using videoconferencing equipment. These offerings are just beginning and we expect the number of opportunities to grow. For example, the UK College of Engineering is developing a grant proposal to have engineering graduate students work with elementary and middle

school students on science content, some of which will be relayed by live videoconferences that allow our students to “visit” research labs at UK, virtually. Videoconferencing and webcasting is even used to improve communications among teachers. For example, some district-wide teacher meetings are now offered via live interactive webcast, enabling teachers to “attend” the meeting from the comfort of their own classroom or home.

Internet Safety. When the Board of Education approved a policy in the fall of 06 requiring every school to implement an Internet safety curriculum, district staff worked with every school to make sure they had the proper training on i-SAFE and supported them in implementing the curriculum. Middle and high schools faced challenges in fitting i-SAFE into their instructional day but a committee of school i-SAFE representatives worked with district staff to develop strategies for streamlining the instruction, and every school completed the i-SAFE curriculum.

We are just summarizing a few the many technology-enhanced instructional activities in the district. Other programs like Kentucky Virtual High School, Earobics, Soliloquy Reading Assistant, digital storytelling and many more are having a positive impact on our students. Many of those have been documented in previous District Technology Assessments. There are several characteristics we’ve found to be common with all of these programs though.

1. When selecting instructional software, look first at programs that are on the district’s adoption list. Those are research-based programs that we know to be effective.
2. Most programs work best if they are “used as instructed.” In other words, if a software company recommends using their product 3 times a week for 15 minutes each but the teacher uses it less than that, the program probably won’t be as effective.
3. Programs need to be carefully matched to the needs of students. For example, if a student is a fluent reader but needs to work on comprehension, that student won’t benefit from a program that’s designed to increase reading fluency. Programs are not “one size fits all.”
4. Programs need to be carefully matched to core content and the program of studies.
5. Productivity software (e.g., video production or podcasting) is well suited for instruction that allows students to demonstrate greater depth of knowledge.

Role of Technology Resource Teachers

In 06/07, the district had a group of 9 district Technology Resource Teachers (TRTs) who were assigned to specific schools and areas of concentration. TRTs had a role in nearly all of the activities described above. Additionally, the TRTs were responsible for the following:

- Job embedded professional development – working directly with teachers in their classrooms. (This is the most important function of TRTs.)
- Developing and moderating online professional development
- Imbedding the new Technology Program of Studies (POS) in the district’s Curriculum Framework and training School Technology Coordinators on the new POS.
- Design and implementation of the district SharePoint system
- Coordination of all STLP programs
- District-wide events, including the Technology Fair and the Technology Enhanced Classroom (TEC) Conference. Plans are underway to revise the Technology Fair in 2008 and change it into a Science, Technology, Engineering, and Mathematics (STEM) Fair.
- Elementary technology academies. This was a series of trainings in which teachers were given hands-on experience with technology activities that were tied to upcoming content in the district’s curriculum framework. The technology academies were modeled on the district’s successful content academies such as the math academy and science academy.
- Design and implementation of a secure blog system that included “content umbrellas” related to biographies, Kentucky regions, Literary Book Club, open response writing, and video production
- Podcasting
- EdVentures – a program to promote school-based entrepreneurial ventures that are developed and run by students.
- Establishing content management systems for managing courses and professional development.
- Videoconferencing
- Webcasts for instruction and professional meetings
- Support for technical aspects of the Reading First grant
- Distance learning courses for high schools
- Coordination and support for iSAFE
- District Literary Magazine, recognizing excellent pieces that our students have written and publishing them as examples for other students and teachers to use as models. This is done in collaboration with district literacy specialists.
- Support for research based programs such as Read 180, SuccessMaker, and others.
- Development a district-wide software adoption list based on teacher recommendations and research-based programs.

- Developed a draft student technology assessment to be piloted at 2 elementary and 2 middle schools in 07/08.
- Wrote grant proposals totaling \$334,509 from KDE, BellSouth (now AT&T), HP, Toyota, Best Buy and other external funding agencies. Not all of the proposals were funded, but we did receive funding for \$157,896 and we are still awaiting word on some additional funding.
- Develop IMMEX problem sets and promote their use in schools.
- Dell TechKnow – a program to provide training and free computers for low income middle school students.
- Support supplementary technologies such as Classroom Performance System, interactive tablets and whiteboards, document cameras, digital projectors, video production, mobile laptop carts, scanners, personal digital assistants, Encyclomedia, etc.
- Develop units of study in various content areas with supporting technology-enhanced activities.
- Student produced literary e-zines at two schools.
- District TIPS newsletter for instructional technology.
- Working with teachers on reading and interpreting data from programs such as PAS, MAP, GRADE, DIBELS, and SuccessMaker.
- Support for district grants such as MILC, Small Learning Communities, TRY-IT, etc.

A grant that funded four of the district TRT positions ended in June '07, so the number of district TRTs will decrease from 9 to 5 in 07/08. However, we plan to maintain many of the initiatives and make adjustments to meet new district needs. We believe the district should continue to find ways to provide the human support that schools need to keep technology as a viable resource for our students and teachers. As cited at the beginning of this section, the district is lagging behind in technology staffing when compared with staffing levels recommended by professional education technology organizations and other private entities. The 2020 Vision technology recommendations are a primary source of planning for the Technology Department. We have made great strides toward accomplishing most of the 2020 recommendations, but we are losing ground on the recommendation to provide adequate school-level technology staff. In 03/04, the district provided 27 Technology Resource Teachers, most of whom were school-based. In 07/08, the district will provide only 5 Technology Resource Teachers.

Business and Administrative Functions

Payroll. Last year the Kentucky Department of Education (KDE) recommended that all school districts adopt a semi-monthly pay schedule for all employees. This would reduce the number of payroll cycles per year and the associated staff time required for processing a payroll. It will also put our district in compliance with KRS reporting requirements without making manual adjustments. Finally, this change will address the concerns of nine and ten-month employees who do not currently receive paychecks during winter and spring breaks.

Since early spring, Financial Services, Human Resources, Planning and Budget, and Technology have been working towards that directive. Extensive design, database setup, and testing have been done and will continue to be done before the implementation date of July 1. Training was offered to staff who will be responsible for summer payrolls and will again be offered to staff in August to returning staff. A comprehensive *Semi-Monthly Payroll Reference Manual* was developed and can be found on the FCPS Website at the FCPS MUNIS Help Center as a SharePoint document. To further assist our users with this implementation, key processes were documented using video clips that will also be available via SharePoint. As we draw closer to the first payroll dates in August, key trainers will be available to timekeepers to assist with implementation issues.

W2 Forms. In the continuing effort to reduce the amount of paper that we produce and handle, we have made available to all of our employees the ability to electronically download their W2 forms. In the fall of last year our employees were provided the opportunity to voluntarily sign up to download their W2 forms through a secure website. Thirty percent of our employees chose this option.

Symphony. In the summer of 2007 Human Resources upgraded the product used to apply online for FCPS job openings. The upgrade of Winocular to Symphony was a coordinated effort involving the Human Resources and Technology departments. An additional requirement was added for applicants seeking teaching positions, which involved linking to The Gallup Organization website. Gallup provides a Teacher Insight survey for teaching applicants. The aim of the survey is to identify specific talents the district can take advantage of, leading to greater excellence in the services we provide our students. The successful linking to Gallup was a collaboration involving several divisions of our Technology Department and KDE.

Symphony allows Principals and Budget Managers to preview candidates, and it provides some additional features. They can now contact references chosen by applicants with a phone call and immediately add this information to the applicant database, which can be viewed by other Principals, Budget Managers and Human Resources staff. This greatly increases the accuracy and amount of information provided by selected references. Queries and lists of candidates for positions can be stored and used later by Principals and Budget Managers, saving time and effort to get the results they need.

Other changes implemented by Human Resources with assistance from Technology staff, were the purchase and installation of desktop scanners for HR staff members who scan applicant and employee records. Record scanning was expanded to also include the Risk Management office and a member of that department was trained to use the scanner.

Employee Self Service. We have contracted with MUNIS to provide a web based application, Employee Self Service, an application that provides access to information in the MUNIS database which normally would only be available through standard MUNIS applications. Employee Self Service provides our employee the ability to monitor and maintain their personal and employment information such as:

- Personal Information
- Pay/Tax Information
- Time Off
- Pension
- Time Sheet
- Benefits Enrollment
- Substitute Teaching
- Employment Opportunities

Some of these screens allow users to make a transaction or complete a process, while other screens allow users to update or change their own information. Still other screens are available for view in inquiry mode only. All of the data used by Employee Self Service is taken directly from the MUNIS database and an update in Employee Self Service also updates MUNIS.

Business Continuation Plan. One of the vital functions of any organization is to maintain secure backups of essential data. For FCPS, payroll processing was determined to be the most critical application in the district and an initial Business Continuation Plan was established for payroll.

Improvements were made in the management of payroll data backups. A fire proof data vault was moved to an offsite location and the most recent 2 weeks of backups are stored there. The backup tapes are rotated on a daily basis.

An off-site processing center was established for processing payroll in the event that our normal MUNIS payroll server was inoperable. The off-site center includes a backup MUNIS file server, workstations and a printer. Processing in the off-site location is tested on a regular basis to assure that processing could occur there if needed. Any deficiencies uncovered during testing are addressed as soon as possible.

Business Continuation Plans will be developed for next most critical applications during 2007-2008. Those are online employee applications, Sub-finder – substitute teacher calling system, and district web pages. The backup procedures for these applications have been improved and will be reviewed periodically. We plan to investigate the feasibility of performing disk data backups in off-site locations multiple times daily. Provisions are in place to ensure that grades, test scores, and other essential information also remains secure and can be retrieved.

Media Services. A new library management system (Destiny) was installed for all schools. The Destiny system is a centralized database that schools access via a web browser. This centralized system eliminated the need for a library file server in each school. Data backups are now done centrally. Schools can now view holdings in other schools and inter-library loan is now possible.

Student Information System. FCPS technology staff participated with KDE in developing bid specifications for the new statewide Student Information System (SIS). We also participated in the vendor selection of the SIS which resulted in a contract awarded to Infinite Campus. Fayette County was selected as one of 14 pilot districts for initial implementation of Infinite Campus. The statewide implementation will take up to 3 years to complete.

District technology staff has received initial training and developed a plan for data conversion and staff training. The data conversion plan calls for 3 trial data conversions and a final data conversion prior to the GO-LIVE date of October 22, 2007. The training schedule for school staff members consists of over 6,000 hours of training in August, September and October. Principals have identified staff members for each training session and most staff members have registered for the classes.

Infinite Campus uses a central data base. School staff, district staff, and parents will access Infinite Campus via a web browser, so there is no client software to install or manage and schools will no longer need to manage file servers for student data management.

Voice Over IP. We are investigating the use of Voice over IP (VoIP) telephony for the district. VoIP provides voice traffic over an internal high speed data network. With the completion of the district-wide fiber-optic network, the district now has sufficient bandwidth to carry both data and voice traffic. The use of VoIP will eliminate many of the current monthly charges for existing voice circuits.

VoIP will provide centralized voicemail, emergency broadcast alerts, group messaging, and call center capability. It seemed prudent to utilize a modern VoIP design for the 3 new elementary schools to be built next year. A prerequisite for connecting the 3 new schools with VoIP was to establish a core site for the district. In July 2007, the core system will be implemented at IAKSS and include services for Springhill Drive and Liberty Road Bus Garage locations.

Planning is underway for implementing VoIP across the district. Schools that currently have the oldest telephone equipment and those that can generate the greatest cost savings will be given higher priority for quicker implementation. This implementation will likely take 3 – 4 years.

Summary

The 06/07 school year has seen tremendous changes in technology. Significant improvements in our network infrastructure are making it possible to open doors of opportunity for our students and to bring more efficiency to our business and administrative functions.

Instructional Device Upgrades are helping us meet state and district goals to provide adequate technology resources in classrooms and throughout the district. We have a vision of how we need to continue upgrading technology resources to meet the needs of our students and staff. We continue to see strong evidence that our technology resources are having a positive impact on student achievement. More than ever before, our teachers have access to data that can lead to instructional decisions that increase learning. With all these changes occurring in 06/07, we remain optimistic about the positive role that technology can and will play in the district for 07/08 and beyond.