Technology Plan:

ELIZABETHTOWN INDEPENDENT SCHOOLS

Elizabethtown, Kentucky



<http://www.etown.k12.ky.us/>

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Approved by Board, \_\_\_\_, 2014

Board Order Number \_\_\_\_\_\_

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KDE Approval Date: \_\_\_\_\_\_\_

Acknowledgments

District Technology Staff

Mike Selvitelle – Director of Assessment and Technology

Josh Brown – Network Engineer

Gayla Barnard – Student Information System Coordinator

School Media Specialists

Alesa Walters - Elizabethtown High School

Angela Rucker – TK Stone Middle School

Stacie Stroop – Morningside Elementary

Lisa Haycraft – Helmwood Heights Elementary

Amy Truitt – Panther Academy

School Technicians

Bonnie Young – Elizabethtown High School

Angela Rucker – TK Stone Middle School

Donna Rovinski – Morningside Elementary

Roy Griffin – Helmwood Heights Elementary; Panther Academy; VV Ed Center

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Executive Summary

Elizabethtown Independent Schools is a high performing district with a history of excellence. The district contains one high school, one middle school, two elementary schools, an alternative education center, one residential facility and a Pre-K facility with a total district student population of approximately 2500 students.

The district has a Wide Area Network (WAN) that connects every building to each other and the Internet and each building has a Local Area Network. The district has a computer and phone in every classroom, with an overall ratio of one computer for every 2.2 students. Nearly every district classroom is equipped with Intelligent Classroom technology.

The district’s technology goals are focused on improving student learning and communicating with our parents and community. This requires a robust network of voice and data assets that are modern and sustainable and includes items like email communication, current and informative web pages, parent portals, One-Call Now communication, Twitter feeds, Facebook, etc.

Technology Vision and Goals

The primary objective of the district’s technological assets is to support the instructional program so that every student is afforded the opportunity to meet the expectations espoused by former superintendent T.K Stone – “For each child all that he is capable of becoming.” In the technological environment we ensure this by providing our staff and students the necessary technology tools and training.

# Goal 1

Increase student learning by increasing thinking and problem-solving skills through the use of modern technology tools/equipment to analyze information and provide a variety of worldwide instructional and learning resources.

# Action Plan: Strategies/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strategy/Activity | Instructional Outcome | Evaluation | Timeline | Person(s) Responsible | Funding Source |
| Provide schools with modern equipment | Insure students and staff can adequately access network and Internet |  | Jul 1, 2014 to Jun 30, 2015 | DTC’s, STC’s, and Principals | KETS, General Fund |
| Make software available that challenges students and enhances learning | Improved student achievement | School evaluation and refunding of successful programs | Jul 1, 2014 to Jun 30, 2015 | Principals, STC’s, School Staff | KETS, General Fund, School Funds |
| Provide access to a district/state wide assessment data base for teachers, administrators and parents | Improved student achievement |  | Start Jul 1, 2014 | DTC, STC’s | KDE |

# Goal 2

Ensure parental access to school, administration and teachers via technology and remove time, place and distance barriers to communication (KDE Master Plan). Provide a responsive and robust technological environment that supports learning and administration while ensuring the safety of our staff and students

# Action Plan: Strategies/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strategy/Activity | Instructional Outcome | Evaluation | Timeline | Person(s) Responsible | Funding Source |
| Use One-Call, Twitter, etc. to provide district updates for parents | Parents better informed, increased parental involvement | Parental feedback | Jul 1, 2014 to Jun 30, 2015 | DTC, School Principals, SISC | General Fund |
| Provide Infinite Campus Portal Service (and mobile app) to Parents | Parents have immediate access to student grades, discipline, etc | Parental feedback | Jul 1, 2014 to Jun 30, 2015 | DTC, School Principals, SISC | General Fund |
| Provide updated District web site | Provide parents and community information | Parent, staff feedback | Jul 1, 2014 to Jun 30, 2015 | DTC, SISC | General Fund |
| Provide local and long distance service for our staff (voice capability in every classroom) | Improved communication between staff and parents | Availability of voice lines in all classrooms | Jul 1, 2014 to Jun 30, 2015 | DTC | E-Rate & Gen Fund Monies |
| Provide Internet access to all staff and students (Internet availability in every classroom) | Internet availability; improved student learning | Availability of Internet in all classrooms | Jul 1, 2014 to Jun 30, 2015 | DTC, District Network Engineer | E-Rate & Gen Fund Monies |

Student Technology Literacy Skills

Provide students with technology skills and the opportunity to use these skills. The goal is for students to reach proficiency by Grade 8.

Link to the Program of Studies: <http://www.education.ky.gov/kde/instructional+resources/curriculum+documents+and+resources/program+of+studies/default.htm>

# Goal 1

Provide students the opportunity to use and learn technology skills in the classroom.

# Action Plan: Strategies/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strategy/Activity | Instructional Outcome | Evaluation | Timeline | Person(s) Responsible | Funding Source |
| Develop a district/school wide plan that ensures all students learn basic technology skills embedded in content instruction | All students capable of using technology for basic applications |  | Fall 2014 | DTC; STC’s; Media Specialists | General Fund (as needed) |
| Develop technology tests for 5th, 8th and 12th grade students that measure proficiency | Evaluation of grade skills |  | Fall 2014 for 8th and 12th grades, 2015 for 5th | DTC; STC’s; Media Specialist, School Staff | General Fund (as needed) |

# Goal 2

Ensure a safe networking environment for our students.

# Action Plan: Strategies/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strategy/Activity | Instructional Outcome | Evaluation | Timeline | Person(s) Responsible | Funding Source |
| Provide Net Trekker access for elementary school students | Screening of internet sites |  | Jul 1, 2014 to Jun 30, 2015 | School STC’s | School Funds |
| Provide iBoss for overall network protection | Blocking of inappropriate sites |  | Jul 1, 2014 to Jun 30, 2015 | DTC, District Network Engineer | General Fund |
| Provide training to students on digital citizenship | Student understanding of the roles and potential dangers of the internet |  | Fall 2014 | STC’s; Media Specialists; Principals and teachers | General Fund (as needed) |

Integration of Technology into Curriculum and Instruction

Like text books and white boards, technology is another tool that teachers should use to enhance instruction.

# Goal 1

Integrate innovative technology into all content areas at all grade levels while promoting the use of research-based technological applications and strategies. Encourage the use of tools like Moodle to integrate technology into the classroom.

# Action Plan: Projects/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project/Activity | Instructional Outcome | Evaluation | Timeline | Person(s) Responsible | Funding Source |
| Provide Intelligent Classroom equipment to all classrooms | Students have technological tools to enhance learning |  | Jul 1, 2014 to Jun 30, 2015 | DTC, Principals, STC’s, Media Specialists | General Fund, KETS |
| Encourage daily use of technology to support/transform classroom instruction | Improves and enhances classroom learning |  | Jul 1, 2014 to Jun 30, 2015 | Principals, STC’s. Media Specialists | General Fund |
| Implement Web 2.0 tools to supplement class instruction | Enhances classroom learning |  | Jul 1, 2014 to Jun 30, 2015 | Principals, teachers | General Fund |
| Provide On-line learning opportunities for students as needed | Additional learning opportunities for EIS students |  | Jul 1, 2014 to Jun 30, 2015 | DTC, Curriculum personnel | General Fund |

**Staff Training/ Professional Development Goals**

Today’s PD focus is on the use of small group or one-on-one instruction centered on classroom utilization. Small group instruction allows the instructor to focus on the specific needs of the staff member and alter their instruction accordingly. The instructor can look at the individual teacher’s curriculum and use real world applications as part of the training. This technique can frequently be conducted in the teacher’s classroom and provide some comforting familiarity for the teacher.

Instead of all-day “This is PowerPoint” training, today our trainers take a smaller part of the subject, conduct training and then provide an opportunity for the trainee to apply what they have just learned to some aspect of their classroom instruction. In addition to reinforcement the teacher can use this time to integrate the learning into his/her classroom curriculum.

School Media Specialists and STCs are the primary professional development trainers for the school. Their goal is to improve student achievement by allowing teachers to incorporate new technology skills through application of new skills into students’ education plan and utilization of technology tools to become more efficient classroom managers. Because time is a limiting factor for Media Specialists and STC’s, a full or part time district technology trainer would greatly improve the professional development of all staff.

With the integration of Intelligent Classroom equipment into the district, the schools have been obtaining and conducting additional PD in small groups and with vendor trainers. Some teachers provide training for staff on Infinite Campus

# Goal

Improve student achievement by allowing teachers to incorporate new technology skills into the classroom.

# Action Plan: Strategies/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strategy/Activity | Instructional Outcome | Evaluation | Timeline | Person(s) Responsible | Funding Source |
| Provide school small group instruction to staff throughout the school year | Increased technology use and higher level of skills | End of Year Self Evaluations by Teachers | Jul 1, 2014 to Jun 30, 2015 | Media Specialists, SISC | ARRA funds |
| Arrange for outside PD for new software | Increased technology use and higher level of skills | Teacher Evaluation of training | Jul 1, 2014 to Jun 30, 2015 | DTC, Principals | ARRA funds |
| Attend technology trainings out of district | Provide train-the-trainer opportunities | Principal evaluation | Jul 1, 2014 to Jun 30, 2015 | DTC & Principals | ARRA funds |

Current Technology and Resources

**Assets**

Staffing

District level

Director of Assessment and Technology

Network Engineer

School level

High School – one half-time STC; one full time Media Specialist

Middle School – one Media Specialist (also STC)

Elementary Schools – Full-time STC (MES) and part time STC (HHE) and

full-time Media Specialist at both schools

Panther Academy & VV Educational Center – Part-time STC; full-time Media Specialist (PA)

District Level

WAN with Fiber point to point connections to every building

25 Mb/s connectivity to Internet (state provided - KEN)

Infinite Campus for student Attendance, Grades, Scheduling, Discipline, Parent Portal

Data analysis programs

Munis financial software

Internet filtering/blocking hardware/software (iBoss)

Windows upgrading software and Anti-virus software (WSUS)

Computer imaging software

Computer, printer access and phone access for all staff

One Call Now phone notification system

School Level

Five school buildings, two Educational Centers

EHS, TKS, HHE, MES, Panther Academy and VV have internal LAN’s and fiber

connectivity

Glen Dale Center has T-1 connectivity

100% of district ports are switched

Wireless Connectivity (selected locations)

Computer, printer and phone in every classroom (Nortel sys in EHS, TKS and VV; VOIP

in PA and HHE)

2.2 to 1 Student to computer ratio

Ten full computer labs, three mini labs, three mobile laptop labs

Technology integrated into classrooms (Word processing, Excel and PowerPoint)

Internet available in every classroom and lab

Infinite Campus for student Attendance, Grades, etc.

Individual Learning Plan for all students, Grades 6 - 12

Computerized food service program

Computerized bookkeeping

Computerized library program (Follett Destiny)

Staff and student email

STLP programs in all buildings

100% of elementary classrooms have Active/Smart boards, projectors and document cameras

Moodle interactive software

JCPS and Novel Stars Distance Learning

Money allocations for each school are based on the school’s ADA. Each school’s Technology Committee evaluates the school’s needs, prepares a technical plan and purchases equipment and software for their school.

**Needs Assessment**

The primary need for technology is to sustain our success from KETS Phase I and increase the use of technology by students and staff in KETS Phase II to:

* Improve student learning
* Improve staff efficiency and productivity
* Enhance parent/staff communications

Consequently, the Needs Assessment (as determined by the District Technology Committee and the annual Teacher Survey) is:

**ELIZABETHTOWN INDEPENDENT SCHOOLS**

**TECHNOLOGY NEEDS ASSESSMENT**

**2014-2015**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Unfunded Need | Rational | CDIP Action Component | Funding Estimate |
| 1 | Continue classroom and building high speed interconnectivity | Current contract with Brandenburg for fiber connectivity between schools and EHS. Provides WAN for district. 70% discounts come from USF |  | $24,210 from USF; GF $9,810 |
| 2 | Increase the district’s 25 mbs connectivity to the Internet to 100mbs (+) | Provides connectivity from the district to Internet. |  | Funding provided by KDE |
| 3 | Continue telephone line access for all classrooms and administrators; convert to PRI’s with implementation of VOIP system. | Basic and long distance phone service for all district offices and classrooms. Provides for staff coordination with parents, safety, etc. 70% discounts come from USF |  | $30,000 from USF; GF $10,000 (estimates) |
| 4 | Upgrade phone systems in all buildings to VOIP system; replace aging system with single district wide system | Phone system at EHS, TKS, VV are at least 15 years old and are no longer being manufactured. MSE is older. All repairs use refurbished parts. EH went down in fall and was out for 3 days. Need upgrade to district-wide VOIP system |  | $135,000 |
| 5 | Upgrade wiring in EH, TK, MS & CO from Cat 5 to Cat6 | Wiring in buildings is old 100mb version; new Cat 6 runs at 1 gbs |  | $280,000 |
| 6 | Contract to have vendor create web sites for all schools | District website was contracted out to Web Guys. Schools still maintain own sites – many have outdated and broken links. No consistency across schools. Full update is $10K; no classroom control for $7K | Strategic Plan – Family and Community Partnerships | $7,000 to $10,000 |
| 7 | Implement BYOD program | Implement a BYOD program | Strategic Plan – Ensuring Quality Teachers |  |
| 8 | Additional support & restructuring of personel | EHS and TKS need full time personnel to support their technology maintenance; district needs district-wide support system |  |  |
| 9 | Bonus salary for STC’s w certifications (e.g., A+) | Providing a bonus for technical personnel will increase the probability of getting employees with recognized skill sets |  | Max of $2,000 per school |

Evaluation

The district uses several different strategies to evaluate the success of the technology program. Among these initiatives:

Student Tests. In the past technology tests have been administered to students in the 5th, 8th and 12th grades. These tests were designed to evaluate student performance at exiting grades to insure that basic technology goals are being attained. The district is in the process of evaluating the test and is focusing on 5th, 8th and 12th grade students.

End-of-Year Teacher Assessments. The past five years the district conducted a teacher survey to assess individual teacher skills. This survey provides invaluable insight into the status of the district technology program. Among the issues addressed:

Evaluation of teacher’s individual skill level

Evaluation of the student use of technology in the classroom

Evaluation of maintenance support

Teacher evaluation of school and district needs.

This survey helps guide procurement, maintenance strategies and focus Professional Development.

# Performance Goal 1 - 8th Grade Student Tests

# Action Plan: Strategies/Activities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Indicator | Target | Tools/Methods Used | Timeline | Person(s) Responsible | Funding Source |
| 5th, 8th and 12th grade students will be tested to determine their proficiency level | 100% Proficiency | 8th Grade Test developed by district using Moodle | 7/1/2014- 6/30/2015 | DTC, TK Media specialist | General Fund (as needed) |

**School Year: 2014-2015**

##### **Annual Budget Summary**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Acquired Technologies and Professional Development** | **E-Rate** |  | **KETS** | **KETS Match (GF)** |  | **GF Tech** | **Other** | **Other**  **Fund Code** |
| School Hardware – Workstns, prntr |  |  | $35,000 | $35,000 |  |  |  |  |
| School Hardware – Licenses |  |  |  |  |  | $10,000 |  |  |
| School Hardware – Phones |  |  |  |  |  |  |  | *Gen Fund – 0011100 0734)* |
| School Hardware - Wireless |  |  |  |  |  | $5,000 |  | *Gen Fund – 0011100 0734)* |
| District Hardware – Workstations, printers |  |  |  |  |  | $8,000 |  | *(Gen Fund – 0011100 0734)* |
| LAN/WAN – Switches, wiring, etc |  |  |  |  |  | $30,000 |  |  |
| District Shared – Salaries |  |  |  |  |  |  | $250,000 | *Cert/Class Pay* |
| District Shared – Telco (Data) | $24,210 |  |  |  |  |  | $9,810 | *0011100 0532* |
| District Shared – Telco (Voice) | $30,000  (est) |  |  |  |  |  | $10,000 (est) | *0011100 0533* |
| District Shared – PD Training |  |  |  |  |  |  |  |  |
| District Shared – Hard Maint |  |  |  |  |  |  | $17,000 | *(Gen Fund – 0011100 0434)* |
| District Shared – Soft Maint |  |  |  |  |  |  | $27,000 | *(Gen Fund – 00111 0648 & 0101918 0648)* |
| **TOTAL** | **$54,210** |  | **$35,000** | **$35,000** |  | **$53,000** | **$313,810** | **$456,020** |

Appendix A – Strategies to Support Goals

A variety of technology strategies and resources are required to assure that these goals are achieved. These include:

*Providing a robust Supporting Infrastructure*

A robust infrastructure is required to ensure that students and staff have timely access to the district network, email and the Internet. This infrastructure includes cabling, wiring closets, closet electronics, and voice and data connections.

In KETS Phase I, access speeds of 56 to 384 kbs were adequate for information accessibility. With the explosive growth of the Internet, the number of computers in the classroom and the state’s move to the new Active Directory structure, greater bandwidth for the district is a necessity. Consequently, the district continually strives to upgrade its infrastructure. The district has upgraded each school to fiber connections with a 25 mbs connection from the district to the state.

*Ensuring Equipment Modernization*

The district reached and exceeded the KETS computer requirements during Phase I (one computer per teacher, one computer for six students). To ensure that students and staff have the requisite tools to reach our goals and are prepared for their future, it is imperative that the district modernize its equipment on a regular basis. To accomplish this goal, the district has developed and budgeted a six-year modernization plan to provide high-speed access to internal networks and the Internet.

*Provide Quality Professional Development for staff*

Technology PD is conducted through one-on-one interface, small and large group instruction, classroom activities and outside training.

Technology tests have been conducted to assess teacher and student technology levels and PD planned and conducted accordingly.

*Ensure Integration of technology into the classroom*

The ultimate test of technology utilization is the degree to which it is integrated into the classroom as defined by student use of technology to enhance their education.

The district has undergone a major overhaul of its curriculum through a series of curriculum alignment processes. As part of this alignment, teams have included activities to help teachers fully integrate technology into the classroom.

To evaluate the effectiveness of use of technology, students are tested at 5th, 8th and 12th grades to evaluate their capabilities on several technology skill tests.

*Maintain Hardware and software*

Bandwidth and hardware will be useless unless it is operating properly – consequently a network, hardware and software maintenance plan is essential.

The district’s maintenance approach emphasizes repair at the lowest level possible. Repairs are escalated from the classroom teacher to the building STC to the district technology team for repair service. Adequate funds are identified to support these efforts.

Hardware and software maintenance contracts are maintained on critical applications, including, Infinite Campus, Lunchbox, Follett, McAfee, Enterasys, Munis, Netspective, and movie licenses.