Technology Plan
Covington Independent Public Schools
Covington, Kentucky

http://www.covington.kyschools.us

Prepared Date: November 11, 2014

Plan Start Date: July 1, 2016

Plan Expiration Date: June 30, 2017

Acknowledgments

District Technology Staff

Greg Bingman

Joe White

Jamarcus White
Mike Willen
John Snow

School Technology Coordinators

Adam Williams

Robin Wells

Elizabeth Alter

Marie Dysert

Elizabeth Lenen
Joe Moran
Deb Winkler

Instructional Coaches

Suzanne Thompson
Amanda Johnson
Paula Roll

Other

Karen Dalton, Cincinnati Bell

Kim Taylor, Cincinnati Bell

Jeff Ford, Extreme Networks

Robin Duffy, Extreme Networks

Table of Contents

Executive Summary

Our primary goal is to provide all students and staff with the best possible technology resources to enable them to be life-long learners in a complex and changing society and increase student achievement. We strive to improve communication among educators and between school and home. It is our belief that student learning is improved with the use of computer technologies. Teachers are expected to become effective users of technology to provide an innovative learning environment for all students. Teachers continue to need Technology Integration Instruction. Students should integrate these technologies in a manner that will address their specific needs and learning styles. They should have the opportunity to develop these skills to support their own learning success. It is our mission to deliver instruction through multiple technological resources.

We know that the effective integration of technology in the classroom has a direct and positive impact on student achievement. As we begin our 1:1 instructional device initiative, we will continue to seek all available funds to purchase additional devices.

We believe that technology impacts student learning in a powerful way and it is especially effective for our diverse student population. We believe that we need to remove barriers in order for teachers to use technology effectively to help students achieve high academic goals. We believe that teachers can then create more student-centered classrooms that will benefit students in the following ways:

- Students will be able to direct their own learning and help others.
- Students will be prepared for the 21st Century job market.
- Students will become productive citizens with technology skills needed for life-long learning.
- Students will be able to create, access, share and evaluate information electronically.

Planning Process and Methodology

The DTC meets with each building administrator (Principal or Assistant Principal) on a monthly basis. These meetings often prompt technology plan discussions. These discussions are usually more focused on the individual schools' needs, but there are many items that are of importance throughout the District. Also, it is common for the building's Technology Assistant (full-time teachers who are helping others with technology before / after school hours) to the join the meetings. They are the ones closet to the teachers and students and are able to share the needs / successes in the classrooms.

Suggestions from these meetings are communicated to the full committee – usually by email. Recommended updates to the District Plan are discussed. The members are notified of the revised plan.

As we move forward there are always goals that are being met, at least on an ongoing basis. We have made significant strides in purchasing updated workstations for staff thru KETS and local funds. This is an ongoing effort.

We are also in the planning stages of a 1:1 endeavor. Our current plan is to start with our 9th Grade students and work from there.

We have been able to continue to fund a stipend for the Building Technology Assistants.

We are maintaining our support and installation of new interactive classroom equipment.

BYOD is enabled for all staff.

As Operating Systems and applications become obsolete, we continue to secure funding for (MS) EES / Campus Agreement program.

We have an online Technology Helpdesk in an effort to provide more support for the students, teachers and staff.

Current Technology and Resources

Presently the Covington Independent Public School District's infrastructure could be described as 'state of the art', in that wireless access to the Internet is available district wide. All school's wiring closets continue to be upgraded to the latest switch technology. The vast majority of the wired wide area network is running at gigabit speeds over district wide fiber optic cabling. In order to take advantage of this situation and to remedy a growing problem of legacy telecommunication equipment, we replaced all telephone infrastructure with a voice over IP capable solution (VoIP). Although we are still using traditional analog/digital phones in most locations, we are expanding true VOIP solution into parts of the district.

The single biggest problem facing the district had been our out of date workstation inventory and the bulk of our efforts have been in the area of replacement. This includes the purchase of emergenging technologies to meet the learning needs of students – including more mobile devices. An increasing number of staff computers have been replaced and we continue to purchase as funds are made available. We are striving to eliminate use of legacy machines, by replacing teacher and student workstations with new multimedia workstations that are capable of meeting the demands of On-Line Testing and the instructional software currently available in support of instruction. Newer technologies will be used to improve the productivity of all users. We plan to upgrade all capable workstations to Windows 10 and Office 2016 soon.

Most technology maintenance is currently a function handled by personnel from the central office or under vendor warranty contacts.

All classrooms are equipped with interactive technology devices.

BYOD is enabled for all staff. BYOD for students is granted as needed as requested by building Principals.

The technology staff strives to stay up-to-data with new technologies that are deployed throughout the district.

Part time Tech Assistants are in place at elementary schools, pre-school and adult education locations to troubleshoot basic needs of teachers.

Technology is available to all students. Every school has at least one computer lab (stationary) for student use. IPads, tablets and other mobile devices are being purchased by schools for student use.

In order to be compliant with the Children's Internet Protection Act, all Internet traffic is filtered through a district proxy device (LightSpeed) and "Everfi" and / or "Common Sense" Internet Use and Safety Curriculum is being presented at all grade levels.

All teachers, staff and parents have secure access to the State Student Information System (Infinite Campus).

Use of moblie devices (Ipads, ipods, tablets, chromebooks, etc) has been increasing throughout the district.

Curriculum and Instructional Integration Goals

Goal 1

Technology and software applications will be utilized to assist formative evaluation of student abilities.

Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
The Measured Assessment of Progress (MAP) test is given to students two times a year. (Fall, Spring)	1) MAP assists teachers / administrators to identify what skills students have so that teachers can address any needs. 2) MAP is also integrated with Compass Odyssey software	MAP testing results available to administrators and teachers after each testing window.	July 2016-June 2017	Curriculum Director, DAC, School Administrators	Local, Title I
Other software including Accelerated Reader, Accelerated Math, APEX will be used to track student progress.	These software packages can assist in providing assessment of skills not evaluated by MAP.	Teacher lesson plans. Software logs.	July 2016-June 2017	School Administrators	Local, Title I

Goal 2

Technology will be utilized for the delivery of specialized courses, including distance learning opportunities.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Compass Odyssey software is available during the regular school day.	Software will allow teachers to provide a Response To Intervention (RTI) model to assist students with skills they need.	Lesson Plans, software logs.	July 2016-June 2017	School Administrators	Local, Title I
Explore various Learning Management Systems to integrate with 1:1 Initiative.	Students and Teachers will start to experience online collaborative learning.	Teachers district wide will be encouraged to use a Learning Management System for collaboration.	July 2016-June 2017	School Administrators High School Teachers	Local, Title I
Students attending Holmes High School and TLC (Tranformational Learning Center) and the A2E (Alternative to Expulsion) program will use the APEX program.	Students can use this program to gain High School Credits.	Number of students who participate and complete the program to achieve graduation credits.	July 2016-June 2017	TLC Director A2E Coordinators /Staff	Local, Title I

Curriculum and Instructional Integration Goals – Evaluation

Evaluation Process: The indicators above describe what data will be used for evaluation.

MAP: DAC and District Curriculum Director works with building principals to create a timeline for MAP testing and assist School Administrators analyze reports from NWEA .

Compass Odyssey: DAC / Curriculum Director share Compass Odyssey usage report with building administrators so they can work with teachers individually.

APEX: TLC and A2E coordinators run reports of usage and make changes as necessary

Student Technology Literacy Goals

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

Goal 1
Students will acquire Technology and literacy skills as specified and KY Board of Education Program of studies Primary-12

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teachers will embed technology instruction in classroom	Students will realize that technology is a necessary skill for 21st Century learning.	Lesson plans; observations by administrators	July 2016-June 2017	School Administrators	NA
Schools will continue to support STLP Programs for students.	STLP allows students to use technology to learn new skills.	STLP Activities documented at the schools	July 2016-June 2017	School Administrators, STLP Coaches	Local, KETS

Goal 2:
Students will become technology Literate by the end of 8th grade.
Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Implement various resources to promote technology integration addressing Tech Standards	Programs will reinforce the student technology skills providing for positive integration.	Lesson Plans; observations by administrators	July 2016-June 2017	School Administrators	Local, KETS, Title I

All students are instructed on Internet Usage and Safety. (Everfi / CommonSense)	Programs will reinforce technology skills and safety.	Activities to be documented at each school.	July 2016-June 2017	Elementary, Middle & High School Administrators	NA

Goal 3

Implement a 1:1 Instruction Device initiative at Holmes High School

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Implement a 1:1 Instruction Device initiative at Holmes High School	Increased student access to content, collaboration among teachers and peers, e-text access, better formative assessment data, 21st century digital learning	Technology Readiness Survey, Bright Bytes Data, observations by administrators	July 2016-ongoing as funding allows	Technology Staff, District Administrative Staff, Holmes High School Administrators	General Fund, Title I, KETS, possible Grants

Student Technology Literacy Goals – Evaluation

Embeded Instruction: School Administrators evaluate the use of Technology in the classrooms during formal and informal observations and via the E-Walk Tool.

STLP Program: School Administrators will continue to encourage and support STLP programs in their schools.

Digital Citizenship / Internet Safety / Literacy: the distict will need to determine WHAT constitutes appropriate competency.

1:1 Initiative: District will need to develop a long-term plan to sustain the initiative - Financially as well as device support over several year.

Staff Training/Professional Development Goals

Goal 1
Provide staff training to build teacher technology skills.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Staff training will be provided regularly based on district, school and indivdual needs. Include LYNC and other collaboration tools.	Trainings will promote integrated use of technology by teachers in the classroom	Lesson plans; observations; PDExpress records	July 2016-June 2017	School Administartors ; Instructional Coaches, Tech Staff, Tech Assistants	Local; KETS, Title I
Maintain trainings for Digital Citizenship for faculty and staff	Increase the appropriate use of technology devices	Observations ; PDExpress records	July 2016-June 2017	Instructional Coaches, Tech Staff, Tech Assistants	Local; Title I

Goal 2
Assist staff with new and emerging Technologies.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide trainings for teachers using tech-based projects (various hardware / software) including online opportunities. (Edmodo / Onedrive / LYNC/ 21st Century EQ)	Enhancement of teachers' technology skills, increased awareness of new technologies and related technology activities across the curriculum	observations; PDExpress records	July 2016-June 2017	Instructional Coaches, Tech Staff, Tech Assistants	Local Title I

Develop an online Self-Help (FAQ) site as part of the District Help Desk for teachers to share information with colleagues.	Increased technology integration awareness and more efficient use of technology	observations; PD Express records. Help Desk Access	On Going	Tech Staff, Tech Assistants, Teachers	NA

Staff Training/Professional Development Goals – Evaluation

The term "Technology Literate" has many meanings. Over the years, we've relied on building administrators and teacher checklists to determine who is (is not) Literate. This is very subjective and sometimes, inaccurate. The attached Teacher Standards (6 – Technology) is a good starting point for administrator evaluations, but we all must continue to strive to keep the teachers engaged and embracing new technologies.

Technology (Hardware) Goals

Goal 1

Maintain and upgrade the District Network to provide adequate access for students and staff

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Continue to update switches / wireless network. LightSpeed installed in the District.	Ensure access to instructional and electronic materials for students and staff	Guest devices able to connect via Network Access Controllers (NAC)	July 2016-June 2017	DTC, Tech Staff	Erate KETS Local
Maintain current/future maintenance contracts with Vendors	Ensure that network is available and reliable for students / staff	Network up and reliable	July 2016-June 2017	DTC, Tech Staff	Local KETS Erate

Goal 2

Upgrade aging workstations and introduce new devices for faculty, staff and students.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Continue plan to replace out of warranty workstations in the	Will provide adequate workstations for students (Online	Reduced percentage of out-of-date workstations –	Ongoing	DTC, Building Administrators	KETS Local Title I

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
district.	assessments, etc) and teachers can plan more effective lessons.	Inventory over time			
Continue to advise and recommend new technologies to staff as they become available	Will provide a variety of devices for specific uses for students / staff.	Increased number of mobile devices, i-devices, tablets, etc on the network.	Ongoing	DTC, Tech Staff, Building Administrators	KETS Local Title I
Maintain funds for MS EES / Campus Agreement.	Will provide adequate workstation OS/ Productivity Software for students (Online assessments, etc) and teachers can plan more effective lessons.	Reduced percentage of out-of-date workstations – Inventory over time	Ongoing	DTC, Tech Staff, Tech Assistants	KETS Local Title I

Goal 3
Maintain and monitor current phone system and streamline the purchase of cellular phones throughout the district.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Streamline purchases and management of cellular equipment used by employees	Reliable communication between administrators and safetly for students	Reduced number of devices (overall). Single vendor to provide all necessary devices /	Ongoing	Purchasing & Finance Dept (Vendor Contracts)	Local, E-Rate

district wide	/ staff.	services.			
The district will coordinate and monitor land line phone service provided and managed by Cincinnati Bell. As E-Rate Reimbursements decline, district will investigate other trending phone technologies – possibly cloud-based opportunities.	Ensure efficient telecommunications are in place.	Phone service up and reliable. Service by Cincinnati Bell in timely manner	Ongoing	DTC, Vendor	Local Erate

Goal 4

Provide support and Continue to purchase Interactive Classroom Equipment in the district

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Assist classroom teachers with "best practices" concept for care and use of Interactive Classroom Equipment	Fewer "Emergency" calls to District tech support staff. Teachers able to solve basic issues without district help.	Fewer "emergency" calles to District Tech support staff.	Ongoing	Tech Staff, Tech Assistants, Teachers	NA
Continue to help	Provide classrooms	Nearly 100% of all	Ongoing	Building	KETS

maintain Interactive Technology Equipment.	with more effective learning options	instructional areas have Interactive Equipment		Administrators, Tech Staff, Tech Assistants	Local Title I

Technology Goals – Evaluation

Items in the Indicator columns will be used to evaluate these goals.

Budget

Annual Budget Summary   School Year 2016-2017

From the state contracts (KETS), Covington Independent Public Schools has chosen Dell as the primary computer vendor, Extreme for network infrastructure equipment and Hewlett-Packard for printers.

Acquired Technologies and Professional Development	Ed Tech Competitive Title IID	Ed Tech Formula Title IID	ARRA Competitive Title IID	ARRA Formula Title IID	NCLB/other than Title IID	KETS	ERATE	Non Discounted
Hardware/Software						$160000		
Professional Development								
other								
Reimbursements – telephone, data lines							$269000	$14000
TOTAL						$160000	$269000	$140000

Digital Citizenship
Using Technology Appropriately
http://www.digitalcitizenship.net/

Nine Themes of Digital Citizenship

Digital citizenship can be defined as the norms of appropriate, responsible behavior with regard to technology use.

1. Digital Etiquette: *electronic standards of conduct or procedure.*
Technology users often see this area as one of the most pressing problems when dealing with Digital Citizenship. We recognize inappropriate behavior when we see it, but before people use technology they do not learn digital etiquette (i.e., appropriate conduct).   Many people feel uncomfortable talking to others about their digital etiquette. Often rules and regulations are created or the technology is simply banned to stop inappropriate use. It is not enough to create rules and policy, we must teach everyone to become responsible digital citizens in this new society.

2. Digital Communication: *electronic exchange of information.*
One of the significant changes within the digital revolution is a person's ability to communicate with other people. In the 19th century, forms of communication were limited. In the 21st century, communication options have exploded to offer a wide variety of choices (e.g., e-mail, cellular phones, instant messaging). The expanding digital communication options have changed everything because people are able to keep in constant communication with anyone else. Anyone is afforded the opportunity to access information anywhere and anytime. Unfortunately, many users have not been taught how to make appropriate decisions when faced so many different digital communication options.

3. Digital Literacy: *process of teaching and learning about technology and the use of technology.*
While schools have made great progress in the area of technology infusion, much remains to be done. A renewed focus must be made on what technologies must be taught as well as how it should be used. New technologies are finding their way into the work place that is not being used in schools (e.g., videoconferencing, online Course Management Systems). In addition, workers in many different occupations need information when they need it (just-in-time information). This process requires sophisticated searching and processing skills (i.e., information literacy). Learners must be taught how to learn in a digital society. In other words, learners must be taught to learn anything, anytime, anywhere. Business, military, and medicine are excellent examples of how technology is being used differently in the 21st century. As new technologies emerge, need to learn how to use that technology quickly and appropriately. Digital Citizenship involves educating a new breed of person—information workers with a high degree of information literacy skills.

4. Digital Access: *full electronic participation in society.*
Technology need to be aware and support electronic access for everyone to create a foundation for Digital Citizenship. Digital exclusion of any kind does not enhance the growth of human beings in an electronic society. One gender should not have preferential treatment over another. Electronic access should not be determined by race, physical or mental challenges that prevent access to technology have to be overcome. Those in cities or towns with limited connectivity need to be addressed as well. To become productive citizens, we need to be committed to equal digital access.

5. Digital Commerce: *electronic buying and selling of goods.*
Technology users need to understand that a large share of market economy is being done electronically. Legitimate and legal exchanges are occurring. The mainstream availability of Internet purchases of toys, clothing, cars, food, etc. has become commonplace. At the same

time, an equal amount of illegal/immoral goods and services are surfacing such as pornography and gambling. Users need to learn about how to be effective consumers in a new digital economy.

6. Digital Law: *electronic responsibility for actions and deeds*
Digital law deals with the ethics of technology. Unethical use manifests itself in form of theft and/or crime. Ethical use manifests itself in the form of abiding by the laws of society. Users need to understand that stealing or cause damage to other people's work, identity, or property online is a crime. There are certain rules of society that fall under illegal acts. These laws apply to anyone who works or plays online. Hacking into others information, downloading illegal music, plagiarizing, creating destructive worms, viruses or creating Trojan Horses, sending spam, or stealing anyone's identify or property is unethical.

7. Digital Rights & Responsibilities: *those freedoms extended to everyone in a digital world.*
Just as in the American Constitution where there is a Bill of Rights, there is a basic set of rights extended to every digital citizen. Digital citizens have the right to privacy, free speech, etc. Basic digital rights must be addressed, discussed, and understood in the digital world. With these rights also come responsibilities as well. Users must help define how the technology is to be used in an appropriate manner. In a digital society these two areas must work together for everyone to be productive.

8. Digital Health & Wellness: *physical and psychological well-being in a digital technology world.*
Eye safety, repetitive stress syndrome, and sound ergonomic practices are issues that need to be addressed in a new technological world. Beyond the physical issues are those of the psychological issues that are becoming more prevalent such as Internet addiction. Users need to be taught that there inherent dangers of technology. Digital Citizenship includes a culture where technology users are taught how to protect themselves through education and training.

9. Digital Security (self-protection): *electronic precautions to guarantee safety.*
In any society, there are individuals who steal, deface, or disrupt other people. The same is true for the digital community. It is not enough to trust other members in the community for our own safety. In our own homes, we put locks on our doors and fire alarms in our houses to provide some level of protection. The same must be true for the digital security. We need to have virus protection, backups of data, and surge control of our equipment. As responsible citizens, we must protect our information from outside forces that might cause disruption or harm.

Publications:
"Digital Citizenship in Schools': from the International Society for Technology in Education (ISTE).
http://www.iste.org/source/Orders/isteProductDetail.cfm?product_code=DIGCIT

6: THE TEACHER DEMONSTRATES THE IMPLEMENTATION OF TECHNOLOGY

The teacher uses technology to support instruction; access and manipulate data; enhance professional growth and productivity; communicate and collaborate with colleagues, parents, and the community; and conduct research.

6.2 Uses available technology to implement instruction that facilitates student learning.

Initial-Level Performance	Advanced-Level Performance
Uses technology to implement instruction that facilitates student learning.	Designs and implements research-based, technology-infused instructional strategies to support learning of all students.

6.3 Integrates student use of available technology into instruction.

Initial-Level Performance	Advanced-Level Performance
Integrates student use of technology into instruction to enhance learning outcomes and meet diverse student needs.	Provides varied and authentic opportunities for all students to use appropriate technology to further their learning.

6.4 Uses available technology to assess and communicate student learning.

Initial-Level Performance	Advanced-Level Performance
Uses technology to assess and communicate student learning.	Uses technology to assess student learning, manage assessment data, and communicate results to appropriate stakeholders.

6.5 Demonstrates ethical and legal use of technology.

Initial-Level Performance	Advanced-Level Performance
Ensures that personal use and student use of technology are ethical and legal.	Provides and maintains a safe, secure, and equitable classroom environment that consistently promotes discerning and ethical use of technology.