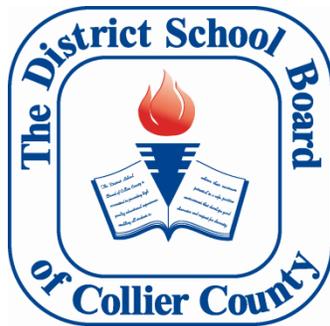


District School Board of Collier County

District Technology

Strategic Plan

2014-2017



A Component of the District Strategic Plan

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Executive Director of Support Services

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WWW.CollierSchools.COM

**Dr. Kamela Patton
Superintendent of Schools**

THE DISTRICT SCHOOL BOARD OF COLLIER COUNTY

Pat Carroll, Chair
Kathleen Curatolo, Vice-Chair
Barbara Berry, Member
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Roy M. Terry, Member

This report has been prepared by Collier County Public Schools.
Additional copies, if available, may be obtained by writing:

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Report Coordinated by: Steven Goldstein, Supervisor, Technology Logistics

No person in this district, shall, on the basis of race, national origin, sex, disability, marital status, religion, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity, or in employment conditions or practices conducted by The District School Board of Collier County.

MISSION STATEMENT

The District School Board of Collier County is committed to providing high quality educational experiences enabling all students to achieve their maximum potential in a safe, positive environment that develops good character and respect for diversity. *For questions or complaints (adults) regarding the Educational Equity Act, Title IX, Section 504 (Rehabilitation Act), or the Americans with Disabilities Act, contact Debbie Terry, Assistant Superintendent of Human Resources, (239) 377-0344. For questions or complaints (students) regarding the Educational Equity Act, Title IX, or The Age Discrimination Act of 1975, contact TBA, Coordinator of Student Services/Guidance & Counseling, (239) 377-0517. For questions or complaints (students) regarding Section 504 (Rehabilitation Act) and the Americans with Disabilities Act, contact L. Van Hylemon, Coordinator of Psychological Services, (239) 377-0521. The address for the above contacts is: The District School Board of Collier County, 5775 Osceola Trail, Naples, FL 34109.*

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DISTRICT TECHNOLOGY PLANS
**ESSENTIAL COMPONENTS
AND E-RATE TECHNOLOGY PLAN CRITERIA**

Districts are expected to submit an updated technology plan covering the essential components contained in this document. It is recommended that the plan cover a period of three years and emphasizes the need to consider periodic revisions to take advantage of new hardware, software and telecommunications opportunities. The updated district technology plan will be a strategic, long-range (three-year) technology plan that will satisfy all state and federal requirements for participation in state and federal grant funding programs.

Essential Components

Following are the eleven essential components to be included in the plan updates:

1. [Mission Statement](#)
2. [General Introduction/Background](#)
3. [Needs Assessment/Goals](#)
4. [Funding Plan](#)
5. [Technology Acquisition Plan](#)
6. [Access](#)
7. [User Support Plan](#)
8. [Professional Development Plan](#)
9. [Program Evaluation](#)
10. [E-Rate Funding](#)
11. [Florida Department of Education – Request for Application \(RFA\)](#)

1.0 MISSION, VISION, STRATEGIES, AND VALUES:

District Strategic Plan Vision Statement	Technology Strategic Plan Vision Statement
<p>All students will complete school prepared for ongoing learning as well as community and global responsibilities.</p>	<p>All students will have access to technology and will effectively utilize that technology to complete school prepared for ongoing learning as well as community and global responsibilities.</p>
District Strategic Plan Mission Statement	Technology Strategic Plan Mission Statement
<p>By providing exceptional educational opportunities that motivate and engage each student.</p>	<p>Infuse technology throughout the school system to provide exceptional educational opportunities that motivate and engage each student.</p>
District Strategic Plan Essential Strategies	Technology Strategic Plan Essential Strategies
<ul style="list-style-type: none"> • Provide every school with a principal who builds a collaborative learning community that produces results for all students. • Ensure that each child has skilled and committed educators. • Provide a safe, caring and rigorous learning environment with multiple opportunities for student development and success. • Develop our diverse student body into a community of learners who are intellectually curious and motivated to achieve. • Collaborate with families as partners in the learning and development of students. 	<ul style="list-style-type: none"> • Technology access and availability for all students and staff. • Acquisition of appropriate technologies to create sound educational forums. • Technology infrastructure to enable connectivity between and within buildings for video, voice and data communication. • Effective and efficient technology standards, policies and procedures. • Appropriate human resources to maintain and support curriculum initiatives. • Adequate financial support to secure the necessary technologies to sustain ongoing and new initiatives.
District Strategic Plan Supporting Strategies	Technology Strategic Plan Supporting Strategies
<ul style="list-style-type: none"> • Dedicate resources to prioritize student learning. • Invest in the continuous growth of all teachers through relevant grade and subject level professional development and mentoring opportunities. • Strengthen an ongoing, two-way dialogue between the District and our community. • Build school communities in which principals, teachers, staff, students and parents value and respect one another and the role that they play in student success. 	<ul style="list-style-type: none"> • Establishment of staff and student technology competency goals. • Appropriate staff development training which will ensure current and future uses of technology in education. • Advanced technology related courses for those who desire greater academic challenge. • Development of minimum technological standards to assure that all purchases support future expansion of the infrastructure. • Communication systems to inform all stakeholders of ongoing technology initiatives.

	<ul style="list-style-type: none"> • Development of business, government and education partnerships to support technology initiatives. • Establishment of short and long term maintenance, upgrading and acquisition plan for all technology equipment and support materials. • Ongoing assessment of technology implementation, involving students, teachers, administrators, support staff, parents and community members.
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District Strategic Plan Values	Technology Strategic Plan Values
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<ul style="list-style-type: none"> • All students can meet and exceed high performance standards and must be continuously challenged to do so. • Each person in the school system must be focused on student success. • We must understand and embrace our students' diverse cultures and learning styles. • The District and the community, together, are responsible for giving students academic and other essential support so they can focus on learning. • The School Board and Superintendent must create and maintain a relationship that is collaborative and trusting, in which all parties have a clear understanding and respect of roles and are working toward shared goals. • Effective, collaborative work with the community will produce success for students. • We must base all of our decisions on evidence and the best interest of students. • We have the ability to meet all state and federal government requirements. 	<ul style="list-style-type: none"> • All students can utilize technology to exceed high performance standards and must be provided with opportunities to meet this challenge. • All use of technology must be focused on supporting student success. • We must use technology to promote understanding about our students' diverse cultures and learning styles and to provide essential support to meet students' unique needs. • Technology should be used to promote effective collaborative work, both within the school community and with the wider community, which will produce success for students. • All decision-making regarding the procurement and use of technology must be based on evidence and the best interest of students. • We have the ability to meet all state and federal government requirements with regard to technology.
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2. GENERAL INTRODUCTION/BACKGROUND

2.1. District Profile – Provide relevant social, economic, geographic and demographic factors influencing the District’s implementation of technology.

2.1.1. An understanding of the demographics of School District of Collier County is essential to the development of plans and strategies which embrace the diverse nature of our schools and their students. The following pertinent information is provided to assist in that regard. Collier County has 52 public schools, as follows, and 12 Alternative Programs housed at locations throughout the District:

Elementary (Pre-K through 5)	30
Middle (6 through 8)	11
High (9 through 12)	8
K-12 School	1
Adult Education	4
Charter Schools	4
Alternative Programs	12

The following chart reflects the demographic data of CCPS student population.

Student Demographics	Number	%
Total Students (PK-12) ¹	44,783	100.00
Students in Poverty ²	28,179	62.92
Migrant Students ³	3,008	6.72
Students in Limited English Proficiency ⁴	6,665	14.88
Students in Exceptional Education Programs ⁵	9,195	20.53
Student Population by School Levels		
Elementary	21,395	47.77
Middle	9,689	21.63
High	12,438	27.77
Total Population of Schools	44,783	100.0

1 Data supplied by FTE Department as of May 2014

2 Students in Poverty defined as students eligible for free and reduced lunch. Information provided by the Department of Food Services as of May 2014.

3 Data supplied by Federal and State Grant Department as of May 2014.

4 Data supplied by ELL Department as of May 2014.

5 Data supplied by ESE Department as of May 2014.

Diversity	%
White	36.83
Black	12.04
Hispanic	47.1
Other	5.04

The above information will be updated with each annual revision of this Strategic Technology Plan.

For Historical Information on Section 2 please see [Appendix E](#)

- **2014-2015** The District will implement the following initiatives
 - Aging Desktops and Laptops that are over 5 years old will be replaced according to the replacement schedule. This will include approximately 4,500 computers.
 - The District will complete the replacement of 10,000 aging CRT monitors with LCD monitors this school year. These monitors will provide better picture quality, enhanced resolution, and greatly reduced power consumption over the much older CRT monitors. This has become increasingly important especially in the area of online testing.
 - ANGEL Learning Management will be simplified and customized according to the age of the end user. The District will begin the transition to the next generation Blackboard Learn system. Learning Object Repositories and online staff development content will continue to grow.
 - The Technology Platform Test (TPT) project will continue to test mobile devices and provide recommendations to the District about devices. This project will continue to test devices with different types of users throughout the District.
 - District Technology Committee will continue to research and recommend an electronic textbook pilot implementation project. This will be conducted in combination with the research of mobile device platforms through the Technology Platform Test (TPT) project.
 - Mobile devices for instructional purposes will continue to be implemented in the areas of STEM, literacy, and assistive technology.
 - The District will research the feasibility of the implementation of a new Student Information System (SIS). The District's current secondary scheduling system, SILK, will reach end of support in the 2014-2015 school year. The District is currently searching for a replacement system and is evaluating the possibility of implementing a new Student Information System (SIS) at the same time. This system would provide an updated user interface, database, and report generation capabilities.
 - The concept of "Flipped Classroom" will be piloted utilizing technology as a means of delivering lecture-style content outside of the school day. Students will then be immersed in project-based learning activities during the school day as well as receive any necessary differentiated instruction.
 - Elementary and middle school science will continue to use a technology-based core science book from Discovery Education. Beta-testing of a technology-based science book will be piloted at the high school level and a social studies book will be piloted at the middle school level.
 - The District will continue to implement the Bring Your Own Device (BYOD) Program at Phase 3 Schools in August of 2014. As of August 2014 all

District schools will have implemented BYOD. As a result the District has made changes to the wireless network including:

- Addition of multiple SSIDs to increase network security
- Device registration portal ensures that all Wi-Fi enabled devices are associated with a user account
- Wi-Fi coverage will continue to be improved within each campus
- The District will continue using an electronic portfolio application called iPortfolio for students in grades 6-12 during the 2014-2015 school year. In addition, students in elementary school will also begin the implementation of electronic portfolios. This system will allow students to create electronic portfolios of their work that they can use as a showcase for education and career needs.
- Adobe Connect sessions will continue to be utilized as a means of conducting staff development webinars and district-level meetings.
- Social Networking for teachers through the use of Edmodo will continue to be used.
- To support elementary standards-based progress reporting, the Department of STEM Resources, Instructional Technology & Media Services as well as the elementary Instructional Resource (IR) teachers will refine and update as well as develop a curriculum map based upon the ISTE-NETS S technology standards, including unit essential questions and touchstone projects to guide instruction.
- Video conferencing will continue to be used to deliver high school courses, trainings, staff development, and for meetings.
- The District will replace all classroom enhancement technology including the video projectors, document cameras, sound enhancement systems, and interactive whiteboards as the equipment becomes unserviceable.
- Increased use of mobile devices, video, class response systems, interactive classroom displays, and Interwrite mobi boards will be monitored to determine future investments in these areas.
- Video storage, retrieval, and accountability of use through the SAFARI Montage system will continue to be enhanced through the implementation of Supetube for posting of videos and as the District continues to move more video on demand content into the system.
- Disaster Recovery will continue to be enhanced through remote replication of Data to remote storage devices and servers.
- Aging network infrastructure (switches/routers) will be replaced with newer equipment. Many of the network switches in the school distribution closets are over 10 years old and are beginning to fail – these devices cannot provide current generation POE (power over Ethernet) capabilities for Access Points and IP based Surveillance cameras.
- While more than 90% of District computers are now running Windows 7, the District will continue to work to ensure all remaining computers running

Windows XP are upgraded as quickly as possible as support ended for Windows XP in 2014. Nearly all instructional computers have been upgraded to Windows 7.

- Software delivery and standardization will continue to be enhanced through expanded use of Desktop Management and Application Virtualization throughout the District. The latest version of ZENworks Configuration Management 11 will be deployed, which will continue enabling enhanced features and functionality.
- Standardization of software titles across all schools will continue to be a priority in order to allow equal access to all types of instructional and productivity software across the District.
- Internet Access will continually be enhanced and upgraded. The District now has a physical internet connection of 10 Gigabits. The district has a Committed Information Rate (CIR) of 1 Gigabit of bandwidth, but now has the ability to burst to higher rates as needed during heavy utilization. Layer 7 filtering policies have been deployed along with a new Internet Filter helping the district to restrict inappropriate content and comply with CIPA regulations. The District has worked to provide Safe Search options for students and ensure that appropriate content is being returned in search results.
- The District has developed standards for desktop and notebook computers at the elementary, middle, and high school levels in order to ensure equitable access to technology throughout the District. These standards will continue to be implemented as resources allow in this and future school years.
- Server consolidation and replacement on virtualized servers will continue as the District moves closer to the goal of 90% of all servers being virtual. This will continue to reduce power consumption while increasing uptime for network applications.
- The District will implement Office 2013 on computers which will become the baseline standard software on all district computers. The District will proceed with the planned upgrade from Exchange 2007 to 2013.
- Supporting the expansion of the Career and Technology course offerings in the High Schools by providing technology, software, and support.
- A remaining 300KW data center battery backup (UPS) will be installed to displace a remaining 80KW unit. This will greatly extend the available runtime, and ensure that critical district resources/applications remain online during an extended power outage.
- The District will continue to upgrade Windows Servers to 2012 and migrate databases to SQL 2012 clusters.
- The District will implement an application hardware load balancer which will improve the performance, security and availability (redundancy) of network applications/services.

- The district will continue to evaluate new VoIP mobility/productivity applications including but not limited to Cisco Jabber, SIP gateways in the district's disaster recovery facility, Cisco Emergency Responder, and Digital Fax Solutions. CUCM (Cisco Unified Communications Manager) appliances will be patched to the latest versions.
- The district will implement DOE's web based Cost Reporting System which will be available for use beginning in school year 2014.
- The district will continue the development of replacement software for its aged Position Control System.
- The district will continue to develop a MS SQL relational database sourced from the district's AS400 data repository. The MS SQL database will feature near real time updates and will support various in-house and vendor provided software applications as well as provide enhanced access to district data.
- The district will continue to develop and enhance software in support of the district's centralized registration initiative.
- The district will develop software to provide on-line enrollment and tracking of employee benefits.

2.2. Planning Process

2.2.1. Development of partnerships with community, business and industry.

The plan has been developed by the Department of Technology and the Department of STEM Resources, Instructional Technology & Media Services who have membership on the District Technology Committee. The Strategic Technology Plan reflects the process that the District is undertaking to keep technology current in schools, business operations functional and forward thinking and considerations for new technologies as a critical element in the decision making.

The District has collaborated with vendors of instructional media and hardware components. The current list of major vendors and the equipment provided is listed below.

- Apple – mobile devices for administrative and instructional purposes
- Audio Enhancement – sound amplification systems for classrooms
- Avermedia – document camera
- Blackboard – ANGEL Learning Management System
- Cambium Learning – Kurzweil and Classroom Suite for ESE students

- Cisco – hardware equipment for network
- Cisco / Tandberg – video conferencing equipment
- Cloze Pro – software to support ESE curriculum
- Discovery Education – Instructional streaming media, science curriculum software
- Diskovery Educational – software to support all curriculum
- Don Johnston – Start to Finish and Crick for Write Online for reading and writing interventions
- eInstruction – classroom response systems, interwrite mobi boards
- Epson – video projector equipment
- Esembler – gradebook program
- Follett – Destiny Library Automation, Textbook Management, and Asset Management Systems
- Freedom Scientific – WYNN for accessible instructional materials
- Houghton Mifflin (Riverdeep)– software to support Math and primary Reading curriculum
- HP – computer hardware including desktops, laptops, servers, and printers
- Microsoft – network and desktop environment software, productivity and application software
- Mimio – Interactive whiteboard system
- Mind Play – Raps 360, My Reading Coach and FLRT for reading interventions
- Neufeld – software to support Math
- New Tek – Tricaster TV studio equipment
- Novell – desktop management and identity management environment
- Rosetta Stone – software to support ELL and Foreign Language curriculum
- Scholastic – Reading Counts and SRI
- SHI – software to support all curriculum
- Troxell – installations for A/V, audio, and electrical in retrofit schools
- UDT – computer peripherals, computers, laptops, tablets, software

2.2.2. Integration of technology in all areas of the curriculum, English Language Learners (ELL) and Exceptional Student Education (ESE), including students with disabilities.

The instructional departments, under the direction of the Assistant Superintendent of Curriculum & Instruction, have the overall responsibility for the development and implementation of technology within their respective

functional areas. These departments identify software that is aligned with the curriculum and supportive of instruction. Once software is identified, a pilot is often run to make sure that the software will be effectively integrated. During this period hardware and software requirements are evaluated, and teacher training is developed. Students receiving ELL and ESE are supported. Funding is allocated annually from the Technology Budget to provide assistive technologies to the schools. The ESE department employs its own Instructional Technology Specialists who provide training and support specifically to teachers who service students with disabilities. ELL works closely with the Department of STEM Resources, Instructional Technology & Media Services to implement software that is appropriate for language acquisition from pre-K through adult literacy.

2.3. Collaboration with existing adult literacy service providers to maximize the use of technologies and project resources.

The adult literacy program is housed at the Lorenzo Walker Institute of Technology, Immokalee Technical Center, and the Golden Gate Adult Learning Center. The program also utilizes computer labs at the middle and high schools throughout the District focusing on specialized software (ELLIS, Skills Bank 5, Rosetta Stone, etc.) designed especially for Adult Basic Education (ABE), General Educational Development (GED), English Language Learners (ELL), Vocational English for Speakers of Other Languages (VESOL), Citizenship and more.

Adult education has formal collaborative agreements with the Farm Workers Jobs and Education, Guadalupe Center, Literacy Volunteers of Collier County Inc., Redlands Christian Migrant Association (RCMA), Immokalee Multicultural Multipurpose Community Action Agency, Empowerment Alliance of SW Florida, and informal agreements with other numerous community service and business sites.

3. NEEDS ASSESSMENT/GOALS

- 3.1.** A description of the information-based processes (Florida Innovation Survey participation, etc.) used for determining District instructional and administrative telecommunications and technology needs.

The technology planning process is designed to address the needs of the three major functions served by technology:

- i. Enhance the delivery of instruction to enable the highest possible level of individual student achievement.
- ii. Equip students with skills and ability to access information that will allow them to excel in a technology dominated world and become lifelong learners.
- iii. Provide efficiencies in the administration and operation of the District.

Primary responsibility for development of the Strategic Technology Plan rests with the Departments of Technology and the Department of STEM Resources, Instructional Technology & Media Services who take the initiative as needed to coordinate and secure input from other District departments, schools (administrators, teachers and students), and the community.

One area of input is the Florida Innovates Survey which all Collier schools are required to complete. The goal of this survey is to provide information to the school site for their School Improvement Plan and for use during district/school level Data Dialogue meetings. It also gives pertinent information to compare technology development within the District to the state. The state sees the importance of technology within the classroom as a major impetus to learning and the survey has gone through several iterations so that data reflects this more accurately.

In planning for technology, the District also receives an annual needs assessment from each school ([Appendix B](#)– District Needs Assessment). This document provides the data on the existing hardware in the school and the projected hardware needs schools will have the coming year. In addition, every teacher has an opportunity to fill out a needs assessment survey on professional development. Data gathered from this survey assists school and district-based administrators in planning professional learning opportunities for their staff members.

The District Technology Committee is made up of administrators, teachers, and other staff members and meets at least quarterly to discuss and review technology issues. Current membership is listed below:

District Technology Committee	
Dr. Cheng Ang	Executive Director, Assessment & Data Management
John Antonacci	Coordinator, Workforce Budgets / WDIS Surveys
Peggy Aune	Principal, MMS
Tom Conrecode	Executive Director, Support Services
Dr. Traci Kohler	Director, STEM Resources, Instructional Technology, and Media Services
Linda Edzkowski	Coordinator, Administrative Technology
Rebecca Endrelunas	Media Specialist, GGM
Steven Goldstein	Supervisor, Technology Logistics
Martha Green	Instructional Technology Specialist
Jose Hernandez	Principal, GGH
Cedar Kraus	Assistant Director, Technology
Rhett Langston	Supervisor, Technology Field Operations
Maria Longa	Director, Federal State Grants
Terrie Mitev	Principal, CPE
Thomas Petry	Director of Technology
Scott Frazier	Manager, Communications and Website Services
Sheri Wiseman	ESE Instructional Technology Specialist
Curt Witthoff	Coordinator, Science
Donna Woods	Coordinator of Operations
Patrick Woods	Executive Director, Student & Staff Projections, Allocations & Reporting
Jon Woofter	Instructional Technology Specialist

As technology continues to change and curriculum gets reviewed and updated, there is a need to revisit the impact on the classroom in a systematic way. It is critical that the District have a plan in place to determine what technologies should be standardized and how to build the infrastructure to support the technology growth and effective delivery. To do this the District has developed a Project Management Strategy which is outlined below:

Project Management Strategy:

- Department determines goals based on needs assessment
 - Oct. – Feb.
- Goals are redefined as projects
- Costs for each project is determined which includes:
 - Evaluation of equipment, software
 - Pricing for individual pieces – Purchasing Dept.
 - Bids for large projects – Purchasing Dept.
 - Personnel needed to complete project
- Budgeting of project
 - March – April
- Project approval
 - June
- Project manager is assigned
- Planning for implementation is scheduled
 - Benchmarks and timeline developed
 - Assessment of project designed
 - Performance measures determined through benchmarks
 - Types of data collection identified
 - Collection of data based on timeline
- Project implementation begins
- Communication of project is done through
 - Meetings
 - Email
 - School visits
- Training planned
 - Model for delivery chosen based upon project
 - Vendor
 - District-wide
 - School-based
 - Train the trainer
 - Conference attendance
 - Online
- Project completed
 - Follow up training and support
 - Equipment/software functional

- Assessments administered
- Final evaluation of project
 - Project manager gathers data
 - Written report of project presented to Senior Leadership

3.2. Identification of telecommunications services and technology infrastructure, equipment (hardware), assistive technology, programming (educational materials, software, media, etc.), replacement, training and support needs.

The technology capital budget is based upon the status of services being delivered to the organization as a whole. Planning and budgeting for the next year is based on the priorities of the District.

3.3. Goals for 2014-2015

Revised Goals for 2014-2015	Project Manager	Cost	Project Examples	Assessment
Create hardware replacement schedule and purchase units to support administrative and instructional programs.	<ul style="list-style-type: none"> Technology Logistics Supervisor 	\$1.8M	<ul style="list-style-type: none"> Growth/Replacement 	<ul style="list-style-type: none"> Installation schedule Inventory FL Innovates Survey Destiny Asset Manager
Continue implementation of the Internet Portal System.	<ul style="list-style-type: none"> Director of Technology Assistant Director of Technology Senior Network Analyst 	Included in software and hardware budgets	<ul style="list-style-type: none"> ANGEL SharePoint School Messenger 	<ul style="list-style-type: none"> Instructional design for portal completed.
Continue implementation of ANGEL Online Collaboration Environment	<ul style="list-style-type: none"> Director of Technology Director of STEM Resources, Instructional Technology, and Media Services Assistant Director of Technology ITS, ANGEL Project Manager 	Included in software budgets	<ul style="list-style-type: none"> ANGEL Training online School site training 	<ul style="list-style-type: none"> Classroom instructions Group (online) Meetings/Trainings Online Training
Implement Blackboard Learn for ANGEL	<ul style="list-style-type: none"> Director of Technology Director of STEM Resources, Instructional Technology, and Media Services Assistant Director of Technology ITS, ANGEL Project Manager 	Approximately \$30,000	<ul style="list-style-type: none"> Use of ANGEL on mobile devices 	<ul style="list-style-type: none"> Teacher/Student Survey
Continue implementation of videoconferencing/webinars to support instructional projects	<ul style="list-style-type: none"> Director, STEM Resources, Instructional Technology and Media Services, Director of Technology, Assistant Director of Technology 	Included in Technology budget	<ul style="list-style-type: none"> Advanced Placement course delivery, webinars via Adobe Connect (example: Mimio training, iTunes training, etc.) 	<ul style="list-style-type: none"> eSembler AP participation rates and test scores, Report of webinar sessions/recorded sessions Scheduling and implementation of

				student projects that require collaborative learning between different schools.
Expand mobile devices for instructional purposes in the areas of STEM, literacy, and assistive technology.	<ul style="list-style-type: none"> Director, STEM Resources, Instructional Technology & Media Services 	Grants and community donations	<ul style="list-style-type: none"> Curriculum content apps 	<ul style="list-style-type: none"> Student achievement data on FCAT 2.0, district benchmark assessments, FAIR, End of Course exams
Pilot the concept of "Flipped Classroom" utilizing technology as a means of delivering lecture-style content outside of the school day. Students will then be immersed in project-based learning activities during the school day as well as receive any necessary differentiated instruction.	<ul style="list-style-type: none"> Director, STEM Resources, Instructional Technology & Media Services 	Included in software and hardware budgets	<ul style="list-style-type: none"> Podcasts utilizing LiveScribe pens, Cameras, and Interactive Whiteboard 	<ul style="list-style-type: none"> ANGEL usage reports, technology survey, student achievement data
Utilize a technology-based core curriculum science book in elementary and middle school science.	<ul style="list-style-type: none"> Coordinator, Science 	Included in the Instructional Materials budget	<ul style="list-style-type: none"> Discovery Education techbook 	<ul style="list-style-type: none"> FCAT science data, science benchmark data, feedback from school-based science contacts
Pilot the use of a technology-based core curriculum science book in high school science.	<ul style="list-style-type: none"> Coordinator, Science 	Included in the Instructional Materials budget	<ul style="list-style-type: none"> Discovery Education techbook 	<ul style="list-style-type: none"> FCAT science data, science benchmark data, feedback from school-based science contacts
Continue Adobe Connect sessions as a means of conducting staff development webinars and district-level meetings.	<ul style="list-style-type: none"> Director, STEM Resources, Instructional Technology & Media Services 	Included in software and hardware budgets	<ul style="list-style-type: none"> Building Technology Coordinator meetings Response to Intervention trainings 	<ul style="list-style-type: none"> Adobe Connect session usage reports Recorded meetings/trainings

Support elementary standards-based progress reporting through the development of a curriculum map based upon the ISTE-NETS S technology standards and includes unit essential questions and touchstone projects to guide instruction.	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology & Media Services 	Included in locational budget of the Dept. of Staff Dev, Instr. Tech & Media Services	<ul style="list-style-type: none"> • Curriculum guide 	<ul style="list-style-type: none"> • Focus group meetings w ith Instructional Resource teachers, student progress reporting results
Continue district professional development that integrates technology into the classroom to enable teachers to meet the NETS-T standards	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology & Media Services 	District operational budget (ITS salaries)	<ul style="list-style-type: none"> • FL Digital Educator, ANGEL online professional development, specific training w ith reading coaches/literacy specialists, math intervention specialists, media specialists, building technology coordinators 	<ul style="list-style-type: none"> • Completion rates of the FL Digital Educator program, Individual staff development evaluations, Florida's Inventory of Teacher Technology Skills, Florida Innovates Survey
Integrate technology throughout the K-12 curriculum to enable students to meet the NETS-S standards in technology	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology & Media Services 	District operational budget (ITS salaries)	<ul style="list-style-type: none"> • E2T2 competitive grant (STEM focus), Curriculum w riting: Pre-Laureate framework, TV production, Instructional Resource lessons 	<ul style="list-style-type: none"> • Number of Pre-Laureate presentations, TV production student projects and contest submissions, Student Tool for Technology Literacy results
Continue Mimio and Mobi training to increase student engagement w ith curriculum content and facilitate teacher monitoring of student understanding.	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology & Media Services 	Included in software and hardware budgets	<ul style="list-style-type: none"> • Training sessions, Mimio created lesson plans and formative assessments 	<ul style="list-style-type: none"> • Technology survey, number of training sessions
Provide technology-based, collaborative environments to deliver online professional development for teachers and administrators.	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology & Media Services 	Included in software budgets, Video-on-demand storage, Free Web 2.0 tools	<ul style="list-style-type: none"> • ANGEL Learning Management System, Web 2.0 tools, Accordent 	<ul style="list-style-type: none"> • ANGEL staff development reports, Accordent usage reports, technology surveys
Continue to use SAFARI MONTAGE video storage and delivery to provide content to users	<ul style="list-style-type: none"> • Director, Technology • Director, STEM Resources, Instructional Technology and Media Services • ITS, Manager • Network Analyst 	Cost Neutral	<ul style="list-style-type: none"> • District Training webinars • Teacher submissions 	<ul style="list-style-type: none"> • Presence of videos in Montage

Implementation of Bring Your Own Device in Phase III Schools and BYOD Action Plan	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology and Media Services • Director, Technology 	Included in Hardware/Software Budgets	<ul style="list-style-type: none"> • Student owned Devices used for instruction in BYOD Phase III Schools 	<ul style="list-style-type: none"> • Successful rollout of BYOD in Phase III Schools
Electronic Textbooks	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology and Media Services • Director, Technology 	Included in Hardware/Software Budgets	<ul style="list-style-type: none"> • Research Electronic Textbooks • Technology Platform Test 	<ul style="list-style-type: none"> • Successful Electronic Pilot and Implementation
Electronic Student Portfolios	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology and Media Services 	Included in Hardware/Software Budgets	<ul style="list-style-type: none"> • Electronic Student Portfolio Project 	<ul style="list-style-type: none"> • Successful implementation of Electronic Student Portfolios
Social Networking	<ul style="list-style-type: none"> • Director, STEM Resources, Instructional Technology, and Media Services 	None	<ul style="list-style-type: none"> • edmodo 	<ul style="list-style-type: none"> • Increase teacher accounts
Technology Disaster Recovery	<ul style="list-style-type: none"> • Director of Technology • Assistant Director of Technology • Coordinator of Administrative Technology 	Part of the Infrastructure budget (9293004)	<ul style="list-style-type: none"> • Parallel datacenter • Synchronous data from the District's Administrative center to the Disaster Recovery facility. • Server operation parallel, to prevent overload of facilities • More detailed information can be found in section 7 – User support plan. 	<ul style="list-style-type: none"> • Active Project
iSeries Audit and Security Enhancements	<ul style="list-style-type: none"> • Coordinator, Administrative Technology 	Included in the Technology Budget	<ul style="list-style-type: none"> • Implementation of Risk Assessor Software • Annual Internal Risk Assessment • On-going system monitoring 	<ul style="list-style-type: none"> • Perform Internal Risk Assessment • Implement policies and procedures to enhance security and reduce risks as identified by Risk Assessor Software
iSeries Operating System upgrade to OS V7R1	<ul style="list-style-type: none"> • Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> • Upgrade AS400 operating system 	<ul style="list-style-type: none"> • Successful implementation of OS V7R1

Enhancements to Grade Reporting Software in support of changes to Elementary Standards Based Reports for school year 2015.	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> Elementary Standards Based Reports 	<ul style="list-style-type: none"> Successful implementation on of Grade Reporting Software enhancements
Software modification in support of House Bill 7031 – requirements for middle and high school promotions and graduation.	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> End of Course Tests graduation requirements 	<ul style="list-style-type: none"> Compliance with changing legislative requirements.
Software modification to District Student System in support of Senate Bill 1076 – Career and Professional Education	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> High School graduation and assessment requirements 	<ul style="list-style-type: none"> Compliance with Senate Bill 1076
Position Control upgrade	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> Replace Position Control Software with enhanced version. 	<ul style="list-style-type: none"> Implementation of enhanced Position Control System
Enhance Web-based Cost Reporting System	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Included in the Technology Budget	<ul style="list-style-type: none"> DOE 2014 Cost Report 	<ul style="list-style-type: none"> Implementation of enhancement to DOE Cost Reporting Software
Development and implementation of Benefits Enrollment/Tracking Software	<ul style="list-style-type: none"> Senior Network Analyst Director of Technology 	Cost Neutral	<ul style="list-style-type: none"> Benefits Enrollment Benefits Tracking and Provider Interface 	<ul style="list-style-type: none"> Implementation of Benefits Enrollment/Tracking Software
Development and implementation on Centralized Student Enrollment Software	<ul style="list-style-type: none"> Senior Network Analyst Director of Technology Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> Centralized Enrollment 	<ul style="list-style-type: none"> Implementation of Centralized Enrollment
Development software interface between SIS and MCS in support on Food Service initiative	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Cost Neutral	<ul style="list-style-type: none"> Data transfer between SIS and MCS 	<ul style="list-style-type: none"> Implementation of software interface
Development and implementation of Weighted Overtime Software	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Included in the Technology Budget	<ul style="list-style-type: none"> Weighted Overtime Pay 	<ul style="list-style-type: none"> Implementation of Weighted Overtime
Selection of Web Enabled Student System (SIS) to replace TERMS	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Included in the Technology Budget	<ul style="list-style-type: none"> Student Management System 	<ul style="list-style-type: none"> Implementation of Student Management System
Implementation of Student Scheduling Software to replace SILK	<ul style="list-style-type: none"> Coordinator, Administrative Technology 	Included in the Technology Budget	<ul style="list-style-type: none"> Student Scheduling Software 	<ul style="list-style-type: none"> Implementation of Student Scheduling Software
Upgrade network infrastructure to support new requirements for client and network devices	<ul style="list-style-type: none"> Senior Network Analyst Assistant Director of Technology 	Included in hardware budget	<ul style="list-style-type: none"> Implementation of new network systems to support additional client devices 	<ul style="list-style-type: none"> Successful implementation of new network devices to support client and network devices
Implementation of Documentum Imaging System	<ul style="list-style-type: none"> Director of Technology Coordinator of Operations 	Included in software and hardware budgets	<ul style="list-style-type: none"> Student Cumulative Folders Board Minutes FAC Drawings 	<ul style="list-style-type: none"> searching, sharing, storing and securing permanent records
Implementation of Documentum District Forms and Workflow	<ul style="list-style-type: none"> Director of Technology Coordinator of Operations 	Included in software and hardware budgets	<ul style="list-style-type: none"> Leave Form Travel Form 	<ul style="list-style-type: none"> Route for approval and post to TERMS
Facilities Records	<ul style="list-style-type: none"> Coordinator of Operations 	Cost Neutral	<ul style="list-style-type: none"> Record Drawings Record Documents Project Number 	<ul style="list-style-type: none"> Complete Set of As-Builts Word Searchable

			Filing	Index Records Collection • Records Management Policy
Continue maintenance of Voice Over IP system, including software updates and configuration of features that can improve user productivity.	<ul style="list-style-type: none"> • Director of Technology • Assistant Director of Technology 	\$100,000	<ul style="list-style-type: none"> • VOIP 	<ul style="list-style-type: none"> • CUCM 10.5 • Jabber SSO • Video Conferencing Integration
Continue deployment of ZENworks 11.3 to district schools, enhance software application delivery, and simplify overall environment.	<ul style="list-style-type: none"> • Director of Technology • Assistant Director of Technology 	Cost Neutral	<ul style="list-style-type: none"> • Implementation of ZENworks Configurations Management (ZCM) • Streamline Imaging process/new computer setup 	<ul style="list-style-type: none"> • Optimization of Software Organization • Consolidation of server resources • Update client versions to 11.3
Complete implementation of updated wireless infrastructure and centralized wireless controllers to support wireless devices. Improve on existing wireless security.	<ul style="list-style-type: none"> • Director of Technology • Assistant Director of Technology 	Cost Neutral	<ul style="list-style-type: none"> • Implement updated wireless security protocols • Update school maps for wireless location services 	<ul style="list-style-type: none"> • Update Access points and centralized controllers • Monitor environment to enable maximum uptime/availability
Complete installation of replacement 300KW APC battery backups in Data Center	<ul style="list-style-type: none"> • Director of Technology • Assistant Director of Technology 	Included in hardware budget	<ul style="list-style-type: none"> • Server Operation • Data Center Redundancy 	<ul style="list-style-type: none"> • Finish installation/turnup on new units • Coordinate cutover of existing PDUs to new circuits
Migrate from Office 2010 to Office 2013 on all district computers	<ul style="list-style-type: none"> • Supervisor of Technology logistics • Assistant Director of Technology 		<ul style="list-style-type: none"> • Software Updates 	<ul style="list-style-type: none"> • Re-Image computers • Update GPO Policy • Update Applications
Implement Application Load Balancer/Firewall	<ul style="list-style-type: none"> • Senior Network Analyst • Assistant Director of Technology 		<ul style="list-style-type: none"> • Network Redundancy • Network Security 	<ul style="list-style-type: none"> • Install Hardware • Setup VIPs • Migrate Servers
Pilot Windows 8.1 Operating system in schools	<ul style="list-style-type: none"> • Supervisor of Technology logistics • Assistant Director of Technology 		<ul style="list-style-type: none"> • Preparations for new desktop operating system 	<ul style="list-style-type: none"> • Prepare 8.1 Image • Coordinate with Schools • Collect feedback

Implementation of Cherwell – Information Technology Service Management (ITSM) system	<ul style="list-style-type: none"> • Technology Supervisors • Coordinator of Operations 	Included in Technology budget	<ul style="list-style-type: none"> • Implementation of new Service Desk Management System 	<ul style="list-style-type: none"> • Successful Implementation • Service metrics aligned with SLAs • Feedback from customer surveys
Re-allocate school technology in order to comply with district student to computer ratios.	<ul style="list-style-type: none"> • Technology Supervisors 	Cost Neutral	<ul style="list-style-type: none"> • Re-allocate Technology to ensure equitable distribution 	<ul style="list-style-type: none"> • Student to Computer Ratios met at all schools
Technology Platform Test	<ul style="list-style-type: none"> • Technology Logistics Supervisor 	Included in hardware budget	<ul style="list-style-type: none"> • TPT Pilot 	<ul style="list-style-type: none"> • TPT Evaluation Matrix • TPT Report
Development of Service Catalog, Service Level Agreements (SLAs), formal documented Incident, Problem, and Change Management procedures, and measurable goals for meeting SLAs	<ul style="list-style-type: none"> • Director of Technology • Coordinator of Administrative Technology • Assistant Director of Technology • Coordinator of Operations • Technology Supervisors 	Cost Neutral	<ul style="list-style-type: none"> • Development of IT Service Catalog • Development of formal Service Level Agreements for all systems and applications • Development of Incident, Problem, and Change Management procedures • Develop goals for Meeting SLAs 	<ul style="list-style-type: none"> • Published IT Service Catalog • Development of measurable goals for meeting SLAs and the measurement against those goals to ensure SLAs are met • Documentation of Incident, Problem, and Change Management procedures, and adherence to procedures

4. FUNDING PLAN

- 4.1. Identification of major sources of funding for district-wide technology needs. Funding sources should be categorized as recurring or nonrecurring and include real and projected dollar amounts for the technology plan period.

Sources of Funding	Recurring or Nonrecurring	Real \$ Amount	Projected \$ Amount
District Capital Budget	Recurring		\$7,858,470.00
District Operational Budget	Recurring		\$3,378,660.00

- 4.2. A sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy for improved educational services.

Department	Operational	Capital	Total
Technology Infrastructure (9293004) – <ul style="list-style-type: none"> • Switches and Routers • Servers • Network Storage • Network Infrastructure Equipment • Cabling & Fiber (new and repair) • UPS Battery Backups • Wireless Infrastructure and Equipment • Other technology infrastructure equipment as needed 	\$0.00	\$2,863,000.00	\$2,863,000.00
Classroom Technology (CLSTECH) – <ul style="list-style-type: none"> • Student and staff computers and laptops • ESE Adaptive Technology equipment • Career Technology Equipment • Printers, scanners and related peripheral devices for students and staff • Other peripheral devices including 	\$0.00	\$3,687,000.00	\$3,687,000.00

headphones, microphones and related devices <ul style="list-style-type: none"> • Computer Repair equipment and parts • Administrative computer needs • Other classroom instructional technology equipment such as: TI Navigator / Graphing Calculators and Science Probes 			
System Support Technicians (NETTECH) – travel expenses, supplies, periodicals, and training for network technology staff.	\$98,640.00	\$0.00	\$98,640.00
Technology (9420) - travel expenses, supplies for computer room and printing requirements for technology, periodicals, and training for technology staff.	\$51,020.00	\$0.00	\$51,020.00
Classroom Technology Enhancement Project (Technology Retrofit) (0304111) – document camera, ceiling mounted video projector, DVD/VCR combo unit, sound system, TV studio.	\$0.00	\$1,308,470.00	\$250,000.00
Maintenance (TECHMNT) – maintenance fees for software and contracted services.	\$1,609,000.00	\$0.00	\$1,609,000.00
Software (TECHSUP) – software needs, software maintenance/upgrades, and software related consulting.	\$1,435,000.00	\$0.00	\$1,435,000.00
Classroom Presentation Equipment Supplies (9420-PRJBULB) – projector bulbs and supplies.	\$180,000.00	\$0.00	\$180,000.00
Professional Development (9525 – TECHTRN) – technology training for staff	\$5,000.00	\$0.00	\$5,000.00

5. TECHNOLOGY ACQUISITION PLAN

5.1. Identification of appropriate technologies to meet the goals of the District instructional program as identified by the needs assessment procedures.

The District has revised its instructional technology standards for student use in order to ensure equity throughout the school district. A brief description of the current standards are listed below. Detailed information about current standards are listed in [Appendix A](#).

Desktop Student to Computer Ratio by level (*Excluding Career Education and Instructional Resource Computer Labs*)

- Elementary: 2.8 to 1
- Middle: 2.9 to 1
- High: 3.5 to 1

Laptop Student to Computer Ratio

- All Levels: 170 Students to 1 Laptop Cart
Currently 16 Laptops are on each laptop cart

The District Technology Committee is currently reviewing the standard of 16 laptops per cart. Due to class size reduction, it has been suggested that carts be changed to a standard of 24 laptops per cart. By doing this, an entire class could use one cart of laptops instead of needing two carts to meet the needs of an entire class.

The Desktop ratios were determined by using the student to computer ratios of individual schools and then averaging the ratios of all schools at each level, (Elementary, Middle, and High School) to determine a ratio for each. Career and Technical Education as well as Instructional Resource Labs were specifically excluded from the calculations. The Laptop ratios were determined by developing a student to laptop ratio for individual schools and then averaging that number for the entire District. The ratios excluded 1:1 Laptop schools from the calculation. The ratios were developed in this manner as a cost neutral approach to computer replacement which was a requirement in the establishment of these standards.

Currently many District schools are not standardized on these ratios. In order to standardize all schools on the ratio computer replacements being purchased in this upcoming year and the next year will be placed at schools that are above the ratio as necessary in order for them to meet the ratio. Also, schools that are currently below the ratio will not be receiving replacement computers until they

reach the ratio through aging of computers and reaching the end of their useful life. The computers that are at schools below the ratio would be surplus once they reach the normal 5-6 year replacement age with no replacements until they reach the ratio.

Technology is critical in supporting teaching and learning within Collier County Public Schools. The District's strategic plan, Superintendent's goals, the Assistant Superintendent of Curriculum & Instruction's Three Year Academic Plan and the Federal/State Race To The Top deliverables drive the instructional program. Florida's new teacher evaluation system (based on the work of Dr. Robert Marzano) as well as the new Florida Educator Accomplished Practices (FEAPs) will require the use of mobile devices to assist administrators with teacher evaluation data collection. Additionally, as elementary grade levels move towards standards-based progress reporting, elementary administrators and teachers will rely on the use of mobile devices to gather student proficiency data in real time.

Technology Rich Network

- Centralized Datacenter housing the Districts Applications and Data
- Centralized Storage Array with Hot Data Replication to remote Disaster Recovery site
- Ethernet connectivity within the school as the Local Area Network (LAN).
- Wireless connectivity within the schools as a Wireless Local Area Network (WLAN).
- Fiber Optic Wide Area Network (WAN) connection to all sites as a primary Network Connection
- Wireless Wide Area Network (WAN) connectivity throughout the District as a backup network connection.

5.2. District plans to acquire software and technology-based educational materials that are usable by students with the widest range of abilities to deliver technology-based instructional programs in support of the Next Generation Sunshine State Standards (NGSSS).

The District purchases curricular software that is research-based and aligned to the Next Generation Sunshine State Standards (NGSSS). For example, the District has invested in reading programs that are recommended by the Florida Center for Reading Research. A software evaluation process is followed to assure that the software is meeting the needs of the students, is supportive of

our curriculum, works on the network, and will have the proper support and training.

- Discovery Education Science
- Earobics - Steps 1 and 2 – K-3
- Language! – Elementary and Middle
- Neufeld Math – K-12
- Reading Horizon's – 6-12
- Riverdeep Destination Math – K through Algebra 1
- Riverdeep Destination Reading – K-8
- Rosetta Stone – K-12 ELL and Foreign Language
- Start to Finish – ESE

The District purchases productivity and system management software to support instruction such as:

- Adobe Creative Suite
- ANGEL Learning Management System
- Destiny Library Manager
- eSembler Gradebook
- Microsoft Office

5.3. Timetable for acquisition of grade-appropriate, up-to-date technologies in sufficient quantities to accommodate student and staff needs for instruction and assessment.

- The Department of STEM Resources, Instructional Technology & Media Services responds to the requests of Curriculum and Instruction and plans with them to determine purchase of the technologies that are grade-appropriate and meet the instructional requirements of the courses being taught. This is done in a timely way beginning in the fall and continuing until the budget is finalized in early May. In this way, the District has time to evaluate new technologies, research them, determine costs, budget for the next school year, and plan implementation. The Department can better prepare for large scale projects and get schools' support.
- The District looks to other resources such as the state's media budget to fund the annual purchase of online reference materials including:
 - ASCD eBooks
 - Countrywatch
 - Discovery Education Streaming
 - Gale Research Library
 - Grolier Encyclopedia

- ProQuest
- WorldBook Encyclopedia

During the annual needs assessment of technology and resulting acquisition process, the Department of Technology gathers information from all areas including: Administrative, Internet, and Network. The Department of STEM Resources, Instructional Technology & Media Services meets with Learning Support Services to determine where software will be needed to support course delivery.

5.4. Appropriate technology acquisition policies or procedures that address the following areas:

- **Consistency and interoperability with existing and planned technology delivery systems;**
- **Upward migration to emerging technology standards; and**
- Support and maintenance requirements

The purchasing policies for the school district are located in [Appendix F](#).

Acquisition for New Schools

Acquisition of technology for new schools will follow the District Standards for Technology as developed by the District Technology Committee. As technology changes these standards will be amended so that a consistency will continue for new construction. In addition, older schools will be moved toward these standards. (See [Appendix A](#)).

Replacement of Computers and other Technology

For the 2014-2015 school year, the District will continue with purchasing computer hardware to include: desktop computers and laptops. Identification of technology to be replaced will occur as part of the annual replacement schedule for aging computer hardware. Once approved, purchase and installation is the responsibility of the Department of Technology.

Software and Hardware Acquisitions

Software will need to be approved by the following departments: Learning Support Services (LSS), Instructional Technology, and Network

Technology; in order to determine if it meets a stated objective and integrates with existing software. All purchases will conform to the hardware and software standards as described on [Section 5.5](#).

Technology Hardware and Software Standards

The Department of STEM Resources, Instructional Technology & Media Services; working together with Learning Support Services (LSS), will set software standards that will meet curriculum criteria. Administrative Technology, Network Technology, Instructional Technology and Cable/Repair departments will be responsible for developing and maintaining performance and other criteria to be used in determining which hardware and supporting software is to be purchased for the schools.

Maintenance

The Department of Technology has overall responsibility for the development, budgeting, and execution of technology maintenance programs. Maintenance programs will be designed to maximize a blended capability of in-house and contracted services, protect and preserve the investment in technology, and minimize life-cycle costs. The District also participates in the HP Self Maintainer Program which allows the Technology Repair department to service HP equipment including desktops, laptops, printers, and servers and be reimbursed for the labor hours.

Vendors (repair/maintenance)

Novell, Microsoft, Riverdeep, Earobics, Epson, HP, Symantec, United Data Technologies, XEROX, Marco Office Supply & Print, Mainline Information Systems, EDR, Rapid Solutions Group Inc., DYMO (mimio), Audio Enhancement, Avermedia, IBM, IFSS, Elation Technologies, SHI, Troxell.

Consultants

API, XEROX, IBM, Crystal Decisions, Rapid Solutions Group Inc., Mainline, Microsoft, VMware, EMC, Citrix, R.A.Schneider.

5.5. Provision for technical guidance to school and district personnel responsible for making strategic technology related purchasing decisions.

It is the job of the Department of Technology and the Department of STEM Resources, Instructional Technology & Media Services to provide guidance to the Building Technology Coordinators, and other personnel, in order to help with

the software and hardware needs of the schools. Below are standards for both, software and hardware acquisitions.

Software Standards

Identification of software to be considered for adoption by schools may originate from many sources: teachers, school-based administrators, curriculum and instruction supervisors/coordinators, textbook adoption committees, and others.

General criteria for instructional software are as follows:

- Server based software should run on Windows 2003 or 2008, and should be capable of running on a Virtual Server.
- Workstation software must be compatible with Windows XP Professional Edition.
- Software should be pre-tested to ensure it interfaces with either the Local Area Network and/or Wide Area Network using TCP/IP Protocol as necessary. Pre-testing should also address bandwidth needs.
- Software should be previewed by Curriculum Support & Instruction and the Department of STEM Resources, Instructional Technology & Media Services to determine if it meets stated objective(s). Whenever possible, software should be field-tested through targeted pilot projects to determine if it is aligned with the curriculum and integral to classroom instruction and student learning. This software should also be evaluated using the District Software Rubric (referenced in the Program Evaluation component of the Technology Plan).
- Documentation and licensing for instructional software licensing must be collected and maintained in a central area for each site, at the District within the Department of STEM Resources, Instructional Technology & Media Services or the Department of Technology.
- Administrative software should be previewed by the Department of Technology and school/department staff to determine if it meets a stated objective and integrates with existing software.

Minimum Hardware Requirements/Standards

Networks

- Hardware such as routers, switches and other network equipment used in the District, school, and department wiring closets should support 10 Gigabit, Gigabit and Fast Ethernet.
- Hardware must operate on a Fiber Optic and Wireless WAN communications network.
- Hardware for networks will operate on enhanced category 5e cable, as a minimum.

- School network equipment, not including wireless LAN, must be capable of 10 Gb and 1Gb speeds
- Network communication equipment must support 10Gb, 1Gb, and 100Mb and include policy based network management capabilities.
- District servers should use blade technology or at an absolute minimum be rack mountable 1U or 2U servers and will connect to external Storage Systems. All servers will be housed at the District's Data Centers.

Midrange

- Hardware must be new and compatible with the IBM iSeries system and capable of integrating with the District wide area network, must support local and remote printing, must support PC compatible hardware as access devices, and support over 5,000 users
- System growth must be taken into account when sizing memory, communication ports, disk storage and off-line storage for backup and retrieval
- Disc storage must be capable of ranging from 800 gigabyte to 1 terabyte

Desktop Computers

- Must be PC compatible
- Must have a 1Gb or faster Network Card
- Minimum of Quad Core Processor
- Minimum of 8 GB of RAM
- Must be certified to run under the Windows 7 (32 and 64 bit) operating systems

Laptops or Tablets

- Must be PC compatible
- Minimum of 1Gb Ethernet Network Card and IEEE 802.11ac Wireless
- Minimum of Dual Core Processor
- Minimum of 8 GB of RAM
- Minimum of 6 hour battery life
- Capability to add External Battery option to extend battery life several hours if needed
- Must be certified to run Windows 7 (32 and 64 bit) operating systems

Mobile Devices

- Wi-Fi capability
- Touchscreen
- Minimum of 6 hour battery life

Printers

- Laserjet or compatible laser printer with a minimum of 15 pages per minute print speed
- Network Card with a minimum speed of 100Mbps for network printing with the TCP/IP protocol and the capability to connect to a Microsoft Active Directory network printing system
- Average yield print cartridge of approximately 2,000 pages

Network Security Systems

- All Networked Security Systems hardware will be designed around the IP, Internet Protocol, and communications standard.
- Networked Security cameras will be compatible with the existing school district Security Camera System and should be able to operate with POE (Power Over Ethernet).
- Networked Security System software shall be a Server/Client based system. A secure thin client application will be preferred.
- All data stored and collected will be saved and recorded in a method to provide evidentiary quality data to the appropriate officials.

6. ACCESS

6.1. Equitable and effective access to telecommunications and other technologies to support teaching and learning by:

- Providing for the equitable distribution of resources to support the Next Generation Sunshine State Standards (NGSSS) and Florida Standards;
- Providing access for teachers, parents and students to the best teaching practices and curriculum resources through technology;
- Providing access for students with special needs including those students with disabilities;
- Providing appropriate access to external instructional service and programming providers, such as public libraries, charter schools, remote teaching sites, home school connections, online products and other services;
- Providing access to information for decision-making by teachers and administrators.
- Through the Internet and phone system, parents, as well as teachers and students, will have access to student information. Parents of high school and middle school students are now able to access grades in the eSembler Gradebook. Parents are also able to view attendance on the gradebook screen.
- Through the Internet using ANGEL LMS parents can access course information and assignments using their student's id and password.
- The Department of Exceptional Student Education provides technology support through the two ESE IT Specialists. They respond to student needs and provide software and hardware to help students with both learning and physical disabilities. Funds are earmarked in the Technology Capital Budget to support these efforts. Likewise, the District has purchased Rosetta Stone to address language acquisition for the ELL population.
- For the past ten years, the District has been distributing the technology as equitably as possible. The District Technology Standards for Elementary, Middle and High schools can be found in [Appendix A](#).
- To successfully implement the District technology goals, principals will need to provide the leadership and impetus in their schools to ensure technology is effectively integrated into classroom instruction. They evaluate the effectiveness

of technology integration through Florida's Educator Accomplished Practices (FEAPs) which supports Marzano's model of teacher evaluation. When appropriate, the use of the Inventory of Teacher Technology Skills assessment helps in this process. It is recommended that each school create a technology team who participates in the technology planning process to identify future needs and assist in the allocation of technology resources.

- Classroom Walkthroughs conducted by district and site-based administrators via the District's intra-district accreditation process provides valuable data on the impact of technology within teaching and learning.
- The District addresses the data needed to effectively manage educational and operational programs. The District also maintains data to comply with the reporting requirements of the Florida Department of Education. The District's databases include all data elements identified within the DOE's Staff and Student Database Manuals. In addition to those data elements required by the DOE, the District also maintains data elements required to meet the needs of the direct initiatives. The District has developed a Data Warehouse where student test results and other pertinent information is made available to teachers and administrators in the planning of student instruction. Excent, an online product to assess, track, and plan student IEPs and EPs, is being used extensively throughout the District. Management systems that are part of software purchases assist in the assessment of students and track progress.
- Internet Connection – Additions: The District currently has two internet connections that it uses for District-wide access. One is a 10Gb Ethernet connection with a 1Gb Committed Information Rate (CIR) and the other is a non-burstable 1Gb Ethernet connection, both are provided by Level 3 Communications. These connections provide the District with an aggregated bandwidth of 2000Mbps through two diverse paths with two different hand-offs, one at Terremark's Network Access Point (NAP) in Miami, and the other at Level 3's Point of Presence (POP) in Fort Myers. This enables a high level of resiliency for internet access for the District. The District has enabled Border Gateway Protocol (BGP) peering between the two connections for an added level of resiliency as well as obtaining a globally unique IP address space. In addition, the District has reduced its internet access costs by eliminating the transport fees associated with delivering internet access from a provider to a District facility for hand-off. The District has done this by co-locating its network equipment in telecommunications central-offices. By doing this, internet access costs have been reduced by 75%.
- Implementation of a Fiber Optic Network –The District has implemented a Fiber Optic network which will provide teachers and students with virtually unlimited learning opportunities. This Fiber Optic network is one of a few in the world that

is entirely District owned and is in entirely underground conduit. In addition, the District has the only Wide Area Network in the area that has a redundant and resilient Fiber Optic Network as the primary connectivity to schools, and a wireless Wide Area Network as the backup. All high schools are directly connected to the Administrative Center at 20Gbps using redundant, aggregated 10Gb links and Elementary as well as Middle Schools are connected to the high school in their geographical area at a minimum of 4Gbps using four redundant and aggregated 1Gb links. This allows for the complete centralization of all District servers and services, as well as virtually unlimited software and internet resource capacity for students.

- Centralized Video over IP Distribution –Safari Montage allows anytime anywhere viewing of video content on any PC. This video content includes Live TV, Pre-recorded content, VHS tapes and DVD's that are currently housed in the District, and the District's own created content, including morning shows, instruction lessons, TV shows, and Live Broadcasts. This system reduces the cost associated with maintaining a coaxial infrastructure in all schools as it will no longer be required. A single cable TV feed will be maintained into the District.

6.2. District acceptable use policy for access to all systems including Internet/World Wide Web that:

- Protects the confidentiality of students;
- Protects intellectual property rights, licensing agreements and legal/ethical standards for sharing of resources with other educational entities; and
- Maintains the integrity of systems, programs and information resources. The policy must address the following issues:
 - Access by minors to inappropriate matter on the Internet and World Wide Web;
 - The safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications;
 - Unauthorized access, including so-called "hacking," and other unlawful activities by minors online;
 - Unauthorized disclosure, use, and dissemination of personal information regarding minors; and
 - Measures designed to restrict minors' access to materials harmful to minors.

District School Board of Collier County, Florida

Bylaws & Policies

7540.04 - STAFF NETWORK AND INTERNET ACCEPTABLE USE AND SAFETY

Advances in telecommunications and other related technologies have fundamentally altered the ways in which information is accessed, communicated, and transferred in our society. Such changes are driving the need for educators to adapt their means and methods of instruction, and the way they approach student learning, to harness and utilize the vast, diverse, and unique resources available on the Network/Internet. The District is pleased to provide Network/Internet service to its staff. The District's Internet system has a limited educational purpose. The District's Internet system has not been established as a public access service or a public forum. The School Board has the right to place restrictions on its use to assure that use of the District's Internet system is in accord with its limited educational purpose. Staff use of the District's computers, network and Internet services ("Network") will be governed by this policy and the related administrative guidelines, and any applicable employment contracts and collective bargaining agreements. The due process rights of all users will be respected in the event there is a suspicion of inappropriate use of the Network. Users have a limited privacy expectation in the content of their personal files and records of their online activity while on the Network.

The District encourages staff to utilize the Network/Internet in order to promote educational excellence in our schools by providing them with the opportunity to develop the resource sharing, innovation, and communication skills and tools that are essential to both life and work. The District encourages the faculty to develop the appropriate skills necessary to effectively access, analyze, evaluate, and utilize these resources in enriching educational activities. The instructional use of the Network/Internet will be guided by the District's policy on instructional materials.

The Internet is a global information and communication network that provides an incredible opportunity to bring previously unimaginable education and information resources to our students. The Internet connects computers and users in the District with computers and users worldwide. Through the Internet, students and staff can access up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges.

First, and foremost, the District may not be able to technologically limit access to services through the District's Network/Internet connection to only those that have been authorized for the purpose of instruction, study, and research related to the District related business. Unlike in the past when educators and community members had the opportunity to review and screen materials to assess their appropriateness, access to the Network/Internet, because it serves as a gateway to any publicly available file server in the world, will open classrooms and staff to electronic information resources.

The Board has, however, implemented the use of a Technology Protection Measure, which is a specific technology that will protect against (e.g., filter or block) access to visual displays/depictions that are obscene, child pornography, and materials that are harmful to minors, as defined by the Children's Internet Protection Act. At the discretion of the Board or Superintendent, the Technology Protection Measure may also have been configured to protect against access to other material and/or web sites

considered inappropriate for students to access. The Technology Protection Measure may not be disabled at any time that students may be using the Network, if such disabling will cease to protect against access to materials that are prohibited under the Children's Internet Protection Act. The Superintendent may temporarily or permanently unblock access to sites containing appropriate material, if access to such sites has been inappropriately blocked by the Technology Protection Measure. The determination of whether material is appropriate or inappropriate shall be based on the content of the material and the intended use of the material, not on the protection actions of the Technology Protection Measure.

The District utilizes software and/or hardware to monitor online activity of staff members to restrict access to child pornography and other material that is obscene, objectionable, inappropriate, and/or harmful to minors. The Superintendent may disable the Technology Protection Measure to enable access for bona fide research or other lawful purposes.

Staff members will participate in professional development programs in accordance with the provisions of law and this policy. Training shall include:

- A. the safety and security of students while using e-mail, chat rooms, social media and other forms of direct electronic communications;
- B. the inherent danger of students disclosing personally identifiable information online;
- C. the consequences of unauthorized access (e.g., "hacking"), cyberbullying and other unlawful or inappropriate activities by students or staff online; and,
- D. the unauthorized disclosure, use, and dissemination of personal information regarding minors.

The disclosure of personally identifiable information about students online is prohibited.

Site administrators are responsible for providing training so that Network/Internet users under their supervision are knowledgeable about this policy and its accompanying procedures. The Board expects that staff members will provide guidance and instruction to students in the appropriate use of the Network/Internet and staff members will monitor students' online activities while at school.

Monitoring may include, but is not necessarily limited to, visual observations of online activities during class sessions and/or use of specific monitoring tools in coordination, if necessary, with Information Technology personnel, to review browser history and network, server, and computer logs.

Staff members are responsible for good behavior on District's computers/network and the Network/Internet just as they are in classrooms, school hallways, and other school premises and school sponsored events. Communications on the Network/Internet are often public in nature. General school rules for behavior and communication apply. The District does not sanction any use of the Network/Internet that is not authorized by or conducted strictly in compliance with this policy and its accompanying procedures. Users who disregard this policy and its accompanying procedures may have their use privileges suspended or revoked, and disciplinary action taken against them. Users granted access to the Network/Internet through the District's computers assume personal responsibility and liability, both civil and criminal, for uses of the Network/Internet not authorized by this policy and its accompanying procedures.

Furthermore, pursuant to State law, staff members shall not use the District's technology resources to knowingly distribute to a student any material that is obscene and harmful to students, in any format

and/or by any manner. Any staff member who knowingly distributes any such material to a student also commits a felony under State law, and is subject to disciplinary action up to and including termination.

Staff members shall not access social media for personal use on the District's network, and shall access social media for educational use only after submitting a plan for that educational use and securing the Principal's approval of that plan in advance.

The Board designates the Superintendent as the administrator responsible for initiating, implementing, and enforcing this policy and its accompanying procedures as they apply to staff members' use of the Network.

F.S. 847.012, 1001.41, 1012.32

H.R. 4577, P.L. 106-554, Children's Internet Protection Act of 2000

P.L. 110-385, Title II, Protecting Children in the 21st Century Act

47 U.S.C. 254(h),(1), Communications Act of 1934, as amended

20 U.S.C. 6801 et seq., Part F, Elementary and Secondary Education Act of 1965,
as amended

20 U.S.C. 6777, 9134 (2003) 18 U.S.C. 2256

18 U.S.C. 1460

18 U.S.C. 2246

76 F.R. 56295

Revised 8/16/11

Revised 7/31/12

Revised 3/11/14

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District School Board of Collier County, Florida

Bylaws & Policies

7540.03 - STUDENT NETWORK AND INTERNET ACCEPTABLE USE AND SAFETY

Advances in telecommunications and other related technologies have fundamentally altered the ways in which information is accessed, communicated, and transferred in our society. Such changes are driving the need for educators to adapt their means and methods of instruction, and the way they approach student learning, to harness and utilize the vast, diverse, and unique resources available on the Internet. The District is pleased to provide Internet services to its students. The District's Internet system has a limited educational purpose. The District's Internet system has not been established as a public access service or a public forum. The District has the right to place restrictions on its use to assure that use of the District's Internet system is in accord with its limited educational purpose. Student use of the District's computers, network and Internet services ("Network") will be governed by this policy and the related administrative guidelines, and the Student Code of Conduct. The due process rights of all users will be respected in the event there is a suspicion of inappropriate use of the Network. Users have a limited privacy expectation in the content of their personal files and records of their online activity while on the Network.

The District encourages students to utilize the Internet in order to promote educational excellence in our schools by providing them with the opportunity to develop the resource sharing, innovation, and communication skills and tools that are essential to both life and work. The instructional use of the Internet will be guided by the Board's policy on instructional materials.

The Internet is a global information and communication network that provides an incredible opportunity to bring previously unimaginable education and information resources to our students. The Internet connects computers and users in the District with computers and users worldwide. Through the Internet, students and staff can access up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges.

First, and foremost, the District may not be able to technologically limit access to services through the District's Internet connection to only those that have been authorized for the purpose of instruction, study, and research related to the curriculum. Unlike in the past when educators and community members had the opportunity to review and screen materials to assess their appropriateness, access to the Internet, because it serves as a gateway to any publicly available file server in the world, will open classrooms and students to electronic information resources which have not been screened by educators for use by students of various ages.

The District has implemented technology protection, utilizing software and hardware measures which monitor, block, and filter Internet access to visual displays that are obscene, child pornography, or harmful to minors. Nevertheless, parents/guardians are advised that a determined user may be able to gain access to services on the Internet that the School Board has not authorized for educational purposes. In fact, it is impossible to guarantee students will not gain access through the Internet to information and communications that they and/or their parents/guardians may find inappropriate, offensive, objectionable, or controversial. Parents/guardians assume risks by consenting to allow their

child to participate in the use of the Internet. Parents/guardians of minors are responsible for setting and conveying the standards that their children should follow when using the Internet.

The Internet is a global information and communication network that provides an incredible opportunity to bring previously unimaginable education and information resources to our students. The Internet connects computers and users in the District with computers and users worldwide. Through the Internet, students and staff can access up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges.

The Superintendent is directed to prepare procedures that address students' safety and security while using direct electronic communications, including instant messaging, and prohibit disclosure of personal identification information of minors and unauthorized access (e.g., "hacking") and other unlawful activities by minors online.

Site managers are responsible for providing training so that Internet users under their supervision are knowledgeable about this policy and its accompanying procedures. The Board expects that staff members will provide guidance and instruction to students in the appropriate use of the Internet.

Students and staff members are responsible for good behavior on the District's computers and the Internet just as they are in classrooms, school hallways, and other school premises and school sponsored events. Communications on the Internet are often public in nature. General school rules for behavior and communication apply. The Board does not sanction any use of the Internet that is not authorized by or conducted strictly in compliance with this policy and its accompanying procedures. Users who disregard this policy and its accompanying procedures may have their use privileges suspended or revoked, and disciplinary action taken against them. Users granted access to the Internet through the District's computers assume personal responsibility and liability, both civil and criminal, for uses of the Internet not authorized by this Board policy and its accompanying procedures.

The Board designates the Superintendent and administrators responsible for initiating, implementing, and enforcing this policy and its accompanying procedures as they apply to students' use of the Network.

F.S. 1001.43, 1001.51

H.R. 4577, P.L. 106-554, Children's Internet Protection Act of 2000

47 U.S.C. 254(h),(1), Communications Act of 1934, as amended

20 U.S.C. 6801 et seq., Part F, Elementary and Secondary Education Act of 1965, as amended

18 U.S.C. 2256

18 U.S.C. 1460

18 U.S.C. 2246

6.3. A Technology Protection Measure is a specific technology that blocks or filters Internet access. It must protect against access by adults and minors to visual depictions that are obscene, child pornography, or (with respect to use of computers with Internet access by minors) harmful to minors. It may be disabled for adults engaged in bona fide research or other lawful purposes. Currently the District employs an R3000 centralized filtering appliance from M86 Technologies to filter out pornographic and obscene content. To authenticate staff and students we use LDAP (Lightweight Directory Access Protocol) and Microsoft Active Directory which connect to the R3000 appliance. This ensures that all Internet requests are sent to the filter and have been authenticated with the individual's network login and password.

The District has implemented filter policies by level all of which exceed the Children's Internet Protection Act (CIPA) requirements. The District has filter policies for students at the elementary, middle, and high School levels as well as a Staff level authentication. These levels are the most restrictive at elementary gradually decreasing the categories of content blocked at each student level (elementary, middle, and high) and the least restrictive being the staff level. These requirements are enforced through network authentication. If a user is not logged in, the filter defaults to a maximum filter enforcement which is the elementary student level.

District-wide implementation of NetSmartz, the website funded and developed through the efforts of the National Center for Missing and Exploited Children and the Boys and Girls Clubs of America, was done during 2005-2006. The program will continue into 2014-2015 with each elementary school developing its own plan to communicate and inform students, teachers, and parents. During 2012-2013 and continuing through 2014-2015, each secondary school will also develop its own plan to communicate cybersafety and the effects of cyberbullying. Many secondary schools contact the State's Attorney General's Office for a more formal training. In addition, secondary schools will provide training to students through a CyberSafety day. The Instructional Technology Department is creating the curriculum for this training. Also, all District staff have access to online cyber safety courses through Safe Schools online.

6.4 BYOD - Bring Your Own Device Program

Collier County Public Schools (CCPS) is pleased to be able to offer our students access to computer technology, including access to the Internet as well as CCPS applications and information technology network. We are dedicated to access and support of appropriate technology which unlocks our potential and connects us locally and globally. We understand that our students are digital natives and live in a world where

information creation and consumption is constantly occurring. We envision a learning environment where technology is a part of us, not apart from us.

We believe that the tremendous value of technology and the information technology network as an educational resource far outweigh the potential risks. We will leverage existing and emerging technology as a means to learn and thrive in the 21st Century and prepare our students for success toward their goals in the competitive global, electronic age. We feel that access to the tools and resources of a world-wide network and understanding when and how these tools are appropriately and effectively used are imperative in each student's education.

BYOD is an acronym for Bring your Own Device. For BYOD, a "device" is a privately owned laptop, tablet computing device, netbook, notebook, e-Reader, iPod touch (or similar), or cell/smart phone. For the purposes of this program, the term "device" also includes any similar product owned by CCPS and provided for student use.

Devices will be used for the following purposes in the BYOD program.

- Projects
- Research
- Response device for assessments
- Collaboration
- Presentations
- Other instructional and school related purposes

Phase 1 BYOD Schools which began the program in August of 2013:

- 1. Barron Collier High**
- 2. Everglades City**
- 3. Golden Gate High**
- 4. Gulf Coast High**
- 5. Lely High**
- 6. Lorenzo Walker Technical High**
- 7. Immokalee Middle**
- 8. Manatee Middle**
- 9. Golden Terrace Elementary**
- 10. Pelican Marsh Elementary**
- 11. Sea Gate Elementary**

Phase 2 BYOD Schools which began the program in January of 2014:

- 1. Naples High**
- 2. Palmetto Ridge High**
- 3. Alternative Schools (no Phoenix)**
- 4. Cypress Palm Middle**
- 5. East Naples Middle**
- 6. Gulfview Middle**

7. Pine Ridge Middle
8. Avalon Elementary
9. Corkscrew Elementary
10. Estates Elementary
11. Laurel Oak Elementary
12. Lely Elementary
13. Manatee Elementary
14. Naples Park Elementary
15. Osceola Elementary
16. Poinciana Elementary
17. Tommie Barfield Elementary

Phase 3 BYOD Schools which begin the program in August of 2014:

1. Corkscrew Middle
2. Golden Gate Middle
3. North Naples Middle
4. Big Cypress Elementary
5. Eden Park Elementary
6. Golden Gate Elementary
7. Highlands Elementary
8. Lake Park Elementary
9. Lake Trafford Elementary
10. Mike Davis Elementary
11. Palmetto Elementary
12. Parkside Elementary
13. Pinecrest Elementary
14. Sabal Palm Elementary
15. Shadowlawn Elementary
16. Veterans Memorial Elementary
17. Village Oaks Elementary
18. Vineyards Elementary

Responsible Use Agreement

BYOD is an acronym for Bring your Own Device. For BYOD, a "device" is a privately owned laptop, tablet computing device, netbook, notebook, e-Reader, iPod touch (or similar), or cell/smart phone. For the purposes of this program, the term "device" also includes any similar product owned by CCPS and provided for student use.

Guidelines

1. In order to utilize the CCPS network (specifically Internet access and related applications) as well as participate in the BYOD instructional program, students and a parent or legal guardian must review and sign the Responsible Use Agreement. This will be considered a legally binding agreement.
2. The student is fully responsible, at all times, for the personally owned device brought to school. CCPS is not liable for any loss, damage, or theft of a personally owned device.
3. The student is responsible for the condition of the device brought to school, including updates, antivirus software, and repair.
4. Personal devices should be charged and recharged outside of school, unless specific permission is granted. Personal devices should be capable of lasting a full day without recharging.
5. Device use is limited exclusively to schools participating in the BYOD instructional program. Outside these schools all electronic devices should be turned off and should not be visible.
6. Devices may only be used in certain approved areas of the school. Students may not use devices in parts of the school designated as no technology zones or any other areas where devices are not permitted.
7. Students may not use any device or service for non-educational purposes during school hours, unless granted permission by a school administrator or teacher.
8. Students must use the District's BYOD network when at school. Students may not use a cell phone or service provider's data network (3G, 4G, LTE, etc.) or any other wired or wireless network other than the BYOD network.
9. CCPS is not responsible for any data charges that a student may incur from a service provider as a result of not following policy of only using the BYOD network while at school.
10. As part of the BYOD instructional program there will be mechanisms in place such as signage and verbal communication to indicate when devices can and cannot be used. Students will observe and follow these procedures at all times while at school.
11. No device, personal or otherwise, may be used to record, store, or transmit any type of image, sound, or video from CCPS, except for approved projects with the express permission of the teacher.
12. If an administrator has credible, specific, and reasonable suspicion that evidence exists of that a violation of this agreement, District policy and/or law may have occurred, or is about to occur, the student's device may be inspected and/or confiscated. This also applies to situations in which there is a reasonable, credible, and specific belief that a student's safety and/or well-being may be at risk. The search itself must be reasonable in scope and not excessively intrusive in light of the age and gender of the student and the nature of the suspected infraction.
13. Disciplinary action that may arise from a credible, specific, and reasonable search involving a handheld or other device and/or the misuse of technology may lead to the loss of technology privileges or any other action deemed appropriate by the District under the circumstances related to any such disciplinary action taken.
14. These guidelines shall be understood to be read consistently with the provision of Rule 12 (Electronic Devices) set forth in the District's Code of Student Conduct.

Background

Collier County Public Schools (CCPS) is pleased to be able to offer our students access to computer technology, including access to the Internet as well as CCPS applications and information technology network. We are dedicated to access and support of appropriate technology which unlocks our potential and connects us locally and globally. We understand that our students are digital natives and live in a world where information creation and consumption is constantly occurring. We envision a learning environment where technology is a part of us, not apart from us.

Wireless access: Students will use their devices to access the internet and network resources through the BYOD wireless network. This network will provide filtered internet access as well as access to some other District systems and resources. Any and all access through the wireless network may be monitored and/or recorded for the purposes of network security and student safety.

We believe that the tremendous value of technology and the information technology network as an educational resource far outweigh the potential risks. We will leverage existing and emerging technology as a means to learn and thrive in the 21st Century and prepare our students for success toward their goals in the competitive global, electronic age. We feel that access to the tools and resources of a world-wide network and understanding when and how these tools are appropriately and effectively used are imperative in each student's education.

The district's information technology resources, including applications and internet access, are provided for educational purposes. If you have any doubt about whether a contemplated activity is acceptable, consult with your teacher or administrator to help decide if a use is appropriate. Adherence to the following agreement is necessary for continued access to the district's technological resources.

Student Network and Internet Acceptable Use and Safety Policy

Advances in telecommunications and other related technologies have fundamentally altered the ways in which information is accessed, communicated, and transferred in our society. Such changes are driving the need for educators to adapt their means and methods of instruction, and the way they approach student learning, to harness and utilize the vast, diverse, and unique resources available on the Internet. The District is pleased to provide Internet services to its students. The District's Internet system has a limited educational purpose. The District's Internet system has not been established as a public access service or a public forum. The District has the right to place restrictions on its use to assure that use of the District's Internet system is in accord with its limited educational purpose. Student use of the District's computers, network and Internet services ("Network") will be governed by this policy and the related administrative guidelines, and the Student Code of Conduct. The due process rights of all users will be respected in the event there is a suspicion of inappropriate use of the Network. Users have a limited privacy expectation in the content of their personal files and records of their online activity while on the Network.

The District encourages students to utilize the Internet in order to promote educational excellence in our schools by providing them with the opportunity to develop the resource

sharing, innovation, and communication skills and tools that are essential to both life and work. The instructional use of the Internet will be guided by the Board's policy on instructional materials.

The Internet is a global information and communication network that provides an incredible opportunity to bring previously unimaginable education and information resources to our students. The Internet connects computers and users in the District with computers and users worldwide. Through the Internet, students and staff can access up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges.

First, and foremost, the District may not be able to technologically limit access to services through the District's Internet connection to only those that have been authorized for the purpose of instruction, study, and research related to the curriculum. Unlike in the past when educators and community members had the opportunity to review and screen materials to assess their appropriateness, access to the Internet, because it serves as a gateway to any publicly available file server in the world, will open classrooms and students to electronic information resources which have not been screened by educators for use by students of various ages.

The District has implemented technology protection, utilizing software and hardware measures which monitor, block, and filter Internet access to visual displays that are obscene, child pornography, or harmful to minors, as defined by the Children's Internet Protection Act. At the discretion of the Board or Superintendent, the technology protection may also be configured to protect against access to other material considered inappropriate for students to access. Nevertheless, parents/guardians are advised that a determined user may be able to gain access to services on the Internet that the School Board has not authorized for educational purposes. In fact, it is impossible to guarantee students will not gain access through the Internet to information and communications that they and/or their parents/guardians may find inappropriate, offensive, objectionable, or controversial. Parents/guardians assume risks by consenting to allow their child to participate in the use of the Internet. Parents/guardians of minors are responsible for setting and conveying the standards that their children should follow when using the Internet. The Superintendent may temporarily or permanently unblock access to sites containing appropriate material, if access to such sites has been inappropriately blocked by the technology protection. The determination of whether material is appropriate or inappropriate shall be based on the content of the material and the intended use of the material, not on the protection actions of the technology protection.

The Internet is a global information and communication network that provides an incredible opportunity to bring previously unimaginable education and information resources to our students. The Internet connects computers and users in the District with computers and users worldwide. Through the Internet, students and staff can access up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges.

Pursuant to Federal law, students shall receive education about the following:

- A. safety and security while using e-mail, chat rooms, social media, and other forms of direct electronic communications;
- B. the dangers inherent with the online disclosure of personally identifiable information;
- C. the consequences of unauthorized access (e.g., "hacking") cyber bullying and other unlawful or inappropriate activities by students online; and,
- D. the unauthorized disclosure, use, and dissemination of personal information regarding minors.

Students shall not access social media for personal use from the District's network, but shall be permitted to access social media for educational use in accordance with their teacher's approved plan for such use.

Users who disregard this policy and its accompanying procedures may have their use privileges suspended or revoked, and disciplinary action taken against them. Users granted access to the Internet through the District's computers assume personal responsibility and liability, both civil and criminal, for uses of the Internet not authorized by this Board policy and its accompanying procedures.

Site managers are responsible for providing training so that Internet users under their supervision are knowledgeable about this policy and its accompanying procedures. The Board expects that staff members will provide guidance and instruction to students in the appropriate use of the Internet, and will monitor students' online activities while at school.

Monitoring may include, but is not necessarily limited to, visual observations of online activities during class sessions; or use of specific monitoring tools, in coordination, if necessary, with Information Technology personnel, to review browser history and network, server, and computer logs.

Students and staff members are responsible for good behavior on the District's computers and the Internet just as they are in classrooms, school hallways, and other school premises and school sponsored events. Communications on the Internet are often public in nature. General school rules for behavior and communication apply. The Board does not sanction any use of the Internet that is not authorized by or conducted strictly in compliance with this policy and its accompanying procedures. Users who disregard this policy and its accompanying procedures may have their use privileges suspended or revoked, and disciplinary action taken against them. Users granted access to the Internet through the District's computers assume personal responsibility and liability, both civil and criminal, for uses of the Internet not authorized by this Board policy and its accompanying procedures.

The Board designates the Superintendent and administrators responsible for initiating, implementing, and enforcing this policy and its accompanying procedures as they apply to students' use of the Network.

Edmodo

Edmodo is a free and secure learning network for teachers, students, and schools. It provides a safe way for us to connect, share content, access homework, participate in discussions and receive class information.

Edmodo will be used strictly for educational purposes using the following guidelines:

1. Students will be required to use appropriate grammar instead of texting language.
2. Edmodo does not allow private student-to-student messaging- the site will be used to discuss school-related content only.
3. No put-downs or sarcasm toward another's ideas. All school rules and consequences related to harassment apply.

Students who violate the guidelines above may face disciplinary action and/or face losing the privilege of using Edmodo.

Student Network and Internet Use Guidelines

Students must respect and protect the privacy of others by:

1. Using only assigned network and user accounts.
2. Only viewing, using, or copying passwords, data, or networks to which they are authorized.
3. Refraining from distributing private information about others or themselves.

Students must respect and protect the integrity, availability, and security of all electronic resources by:

1. Observing all district Internet filters and posted network security practices.
2. Reporting security risks or violations to a school administrator.
3. Not destroying or damaging data, networks, or other resources that do not belong to them, without clear permission of the owner.
4. Conserving, protecting, and sharing these resources with other users.
5. Not creating ad-hoc, peer-to-peer, or other wireless networks with district or student owned devices including the use of wireless hotspots or other similar devices.
6. Having a limited expectation of privacy when using district or student owned devices on the CCPS network.
7. Only using the CCPS network for instructional and school related purposes.
8. Notifying a school administrator or teacher of computer or network malfunctions.

Students must respect and protect the intellectual property of others by.

1. Following copyright laws (not making illegal copies of content, eBooks, music, games, or movies).
2. Citing sources when using others' work (not plagiarizing).

Students must respect and practice the principles of community by:

1. Communicating only in ways that are kind and respectful.
2. Students should have a limited expectation of privacy when using district or student owned devices on the CCPS network.
3. Reporting threatening or discomforting materials to a school administrator or teacher.
4. Not intentionally accessing, transmitting, copying, or creating mobile apps, websites, or other material with inappropriate information, content, ads, or any material that is not age or school appropriate.
5. Not intentionally accessing, transmitting, copying, or creating material that violates the school's code of conduct (such as messages/content that are pornographic, threatening, rude, discriminatory, or meant to harass).
6. Not intentionally accessing, transmitting, copying, or creating material that is illegal (such as obscenity, stolen materials, or illegal copies of copyrighted works).
7. Not using the resources to further other acts that are criminal or violate the school's code of conduct.
8. Use of another student's device only when specifically permitted by that student and with the permission of a school administrator or teacher.
9. Following the District's social media policy by only using the Edmodo social media platform and only for a teacher approved assignment. Please see the social media policy at: <http://www.collierschools.com> for more information.
10. Avoiding spam, chain letters, or other mass unsolicited mailings.
11. Refraining from buying, selling, advertising, or otherwise conducting business, unless approved as a school project.

Students may, if in accord with the policy above:

1. Design and post materials in approved locations from school resources.
2. Communicate electronically via tools such as email, chat, text, or videoconferencing (students require a teacher's permission).
3. Install or download software, if also in conformity with laws and licenses, (students must be under the supervision of a teacher).
4. Use the resources for educational purposes.

7. USER SUPPORT PLAN

7.1. Network management and improved support for end-users in classrooms.

The Technology Department works to continuously enhance support for students, teachers, and staff. System Support Technicians (SST) are grouped by area, to allow for the best allocation of resources where they are needed most. This has allowed greater movement of technical support to the areas where it is needed. For example, if a new computer deployment is occurring at a high school, then several SST resources from the area can be positioned there to assist with the deployment. In addition, if a school has a large number of work orders, then additional resources will be allocated to resolve all of the work orders at that location. The SSTs have what is called a primary area of responsibility. These are the school assignments that they normally start at each day and ensure that the school has no emergencies and that everything is working correctly. After this, their Field Service Manager or Lead SST, who are assigned to schools in each area, may allocate the SST's to where they are needed most. Currently there are seven areas with each area being identified by a high school and are composed of that high school as well as the elementary and middle schools surrounding them. There are typically three to a maximum of four SSTs per area including Field Service Managers and Lead SSTs. The goal of this plan is to continuously improve response and resolution time of work orders throughout the District.

In addition, the Technology Department works to continuously increase the use of the centralized help desk for resolution of issues. Through the use of remote view / control of end user computers, both help desk and SST technicians are able to resolve issues in a much quicker and more efficient manner than through traditional means. By having remote access, technicians can instantly work with a user in real time to resolve an issue rather than having to visit the computer. Since SSTs are assigned to at least two to three schools and more in some cases, the ability to instantly access an end user's computer is crucial to ensure speedy resolution of issues.

By allocating resources effectively, the Technology Department has managed to improve end-user support without incurring any additional staffing costs and has implemented a plan that continually improves and maintains a high level of end-user support. With the opening of additional schools and facilities, the department has implemented a plan to maintain the current staffing level and costs while improving end-user support and providing effective coverage to all sites in the District. Students, teachers, and administrators throughout the District

will continue to see improvement and a high level of support by the department through effective allocation of its resources.

Another way the Technology Department has enabled greater efficiencies and resolution of issues is through the use of a Network Operations Center (NOC). This center is staffed with network specialists who perform their normal job functions such as Voice over IP (VoIP) phone system administration, server administration, etc. as well as monitor and resolve network issues as they occur. This has enabled the Technology Department to take a proactive approach to monitoring network issues by discovering network issues as they occur in real-time. This enables the department to proactively respond to these issues and work to resolve them before end users are affected. The NOC is staffed 12 hours a day from 6 AM to 6 PM Monday thru Friday. The individuals in the Network Operations Center respond to alerts from network monitoring systems. In addition, the NOC receives calls from school-based technicians, Building Technology Coordinators (BTCs), District and School Administrators, as well as many other individuals who notify the NOC of a network issue their school or site is experiencing. Outside of the normal NOC shift hours, network systems are monitored by on-call Network Analysts 24 hours a day, 7 days a week who receive proactive automated alerts from network systems if an issue occurs. The on-call network analyst(s) determine what the issue is, rank the issue by level of severity, and if the event will affect end users, responds to the event regardless of time of day. If the on-call network analyst requires assistance to resolve the issue, a phone escalation list is used to bring in additional help. This ensures that the problem is resolved efficiently and in a timely manner.

For example, if a network outage is detected by the network monitoring system at 10:00 PM, the analyst receives word and determines the source of the outage. If it were a Fiber Optic Network Cut, the Director of Technology, Assistant Director of Technology, and Network Cabling Manager are notified. These three individuals work together to determine where the cut has occurred and deploy resources to that location. In an after-hours situation, the goal is to be on-site within two hours from the time the outage occurred. The team responding to the issue will have the necessary equipment to (at a minimum) temporarily repair or replace the cable and splice the necessary fiber strands to restore service to all affected schools and sites. In an after-hours situation, the department works to restore service by 6 AM.

In addition, the District's incident management (work order) system reporting functions have helped immensely to determine the best allocation of resources. The system tracks work order resolution time, which the Field Service Managers,

Lead SSTs, and the Supervisor of Field Operations are able to use for allocating additional assistance as needed. The goal of the department is to have 100% of all work orders resolved within 48 hours. Through the use of the reports, the department is now above 80% of work orders resolved within 48 hours. By continually improving the allocation of resources, the department is striving to reach 100% of work orders resolved within 48 hours. In addition, the Supervisor of Field Operations reviews weekly reports of work order resolution times and the number of outstanding work orders per site and area. Through this process, this person is able to determine if a particular area needs more assistance than another area. This has allowed even quicker resolution of work orders.

Network management in the District has also been greatly improved by reallocating available SST's to perform network functions that in the past were very difficult to complete due to time constraints. These SST's are trained to perform network management functions that have greatly improved responsiveness and uptime at the network level. In addition, through effective use of its equipment resources and projects such as the Wireless Wide Area Network, the department is increasing speed, availability, and resiliency of the network while reducing operating costs.

7.2. Development of district technical options for equipment maintenance and replacement.

The Department of Technology is developing a plan of support options for equipment maintenance and replacement. The current plan is to replace workstations at the rate of 20% a year. The District purchases all computer hardware and maintains the equipment using repair specialists who are certified on the computer hardware the District utilizes. The District currently maintains approximately 27,000 desktops and laptops.

In addition, district servers are on a three-year replacement cycle in order to maintain high availability and uptime. Due to the intense use of district servers, it is important to replace them when their three-year warranty has expired. The department has already completed a project, which clusters all school based, as well as administration servers in order to reach 99.999% uptime. A cluster (two or more servers operating in parallel) is able to provide all services in the event of a failure of any single server. In the event of a failure of either node, the other node will take over the services of the failed server to ensure that end-users do not experience any issues. This plan reduces server replacement costs as the cost of maintaining this system with no single point of failure is significantly lower than trying to maintain as high of uptime as possible on any one server. The

Department of Technology has implemented several support options for equipment maintenance and replacement.

Datacenter improvements, storage improvements, security cameras, etc. storage capacity, backup, etc.

2009-2010 VMWARE Server - The concept of provisioning virtual servers rather than physical servers has seen exponential growth in recent years, especially as the number of applications requiring dedicated server resources has been continuously increasing. With the traditional physical server approach, each application would require dedicated hardware and an application would function on one server without the ability to migrate for maintenance or if server hardware fails. Clustering and Storage Area Networks (SAN's) have been used extensively in our environment to resolve these critical issues; however clustering still does not address many concerns. While nearly all district applications and file services reside on SAN's and are clustered to attempt to achieve 99.999% reliability, there are many applications that are not designed to be clustered and it is impossible to do so with the way the application is written. Virtualization addresses these issues by removing the tie between applications and physical hardware. Applications and data are stored on SAN devices which, through the use of VMWARE, allow the applications to move from one physical server to another without service interruption. There are a number of cost benefits associated with server virtualization as well, since server hardware no longer has to be over provisioned. Server virtualization is an excellent technology that has increased uptime, provisioning of servers and applications, and reduced costs throughout the District.

Decrease server provisioning time by 95% - Previously, all servers were built one by one, requiring a specialist's time to build the server and install all updates and applications. This means that the specialist had to install the server in the rack, make all connections to it (including power, network, etc.) as well as install the operating system and all the other standard features before the server was ready for the application. With VMWARE ESX, pre-made templates and images are used to provision servers. This means that to create another server, the administrator simply creates another virtual server on the physical cluster from a template, and in 5 minutes the new server is ready for the application to be installed. This entire process is software based with no additional hardware or connections required. VMWARE allocates the hard drive space, network connections, etc. in software and does not waste more physical resources.

VirtualCenter and VMotion Benefits - Virtual machines can be automatically moved between physical servers in a VMware environment. This can be done on the fly with no interruption to services or the application environment. Virtual Machines can be moved automatically when a physical server fails or when server utilization thresholds such as Processor or Memory are exceeded. This allows the virtual environment to heal itself and respond to application utilization spikes and hardware failures. In addition, applications that are not capable of clustering are still able to achieve 99.999% reliability because they can be dynamically moved between servers. This also means that routine maintenance can be performed on servers while virtual machines are running on other physical servers in the environment.

Memory Sharing Technology - Many times servers require more memory for short intervals of time when they have utilization spikes. In physical application environments, administrators must provision servers for the maximum possible utilization because the server must be able to handle peak utilization. With VMware, separate virtual machines on the same server can share memory when a particular application requires it. As utilization decreases, the memory that was used is returned to the source virtual machine. This allows virtual machines to meet peak demands without over-provisioning.

SAN Storage with VMWARE VMotion Technology, virtual server images are required to be stored on a SAN device in order to migrate the virtual servers between physical servers. This reduces server storage costs because server hard drives are no longer required. In addition, SAN storage may be partitioned out as required to servers rather than placing storage in functional silos inside of physical servers where it may not be utilized by other servers.

Server Consolidation Ratios - Through the use of server virtualization, the District has achieved a consolidation ratio of at least 1:30 – this means that 1 physical server hosting virtual machines can replace 30 traditional physical servers. With future improvements in server technology, there is a potential for ratios higher than 1:50. The ratios which have been achieved through virtualization have been enormous, and continue to grow.

Datacenter Rack Space usage Reduction by at least 75% - By utilizing server virtualization, Datacenter space utilization has been decreased by a minimum of 75% due to the lower number of physical servers utilized. This is based on a server consolidation ratio of 1:30 and has drastically reduced Datacenter space issues.

Power and Cooling Cost Reduction by at least 75% - By utilizing server virtualization, power and cooling utilization and costs have decreased by a minimum of 75% due to the lower number of physical servers utilized. This has significantly lowered power and cooling utilization and costs.

Disaster Recovery Datacenter – the District has developed a plan to implement a parallel Datacenter in addition to its main facility at the Administrative building. Critical Data including instructional applications as well as teacher and student data files will be synchronously sent from the Administrative building to this facility at Terremark's NAP of the Americas in Miami, FL. This facility will also allow the operation of servers in a parallel manner to prevent overload of the primary facility as the District continues to rapidly expand. In addition, this facility will allow the District to buy internet access at an extremely reduced rate due to collocation capabilities as it is a Tier 1 Internet Access facility where 270 internet providers terminate directly into the Internet cloud. Also, District clusters will be spread across these Datacenters and if a failure were to occur at either facility, the surviving location would provide services to the District. This parallel Datacenter design will ensure high availability of critical District data as well as allowing the District to handle rapid growth of instructional applications and the technology needed to support the rapidly growing student population.

10 Gigabit Datacenter Connectivity – The District is currently in the process of upgrading connectivity within the datacenter to servers and blade enclosures. Instead of connecting 16 individual bonded 1-gigabit connections to each server enclosure, four 10-gigabit connections will be used in a load balanced configuration. There are two advantages to this configuration – the amount of bandwidth available to servers is increased by at least 100%, and the amount of physical cabling required in the data center is reduced by 75%.

8.

PROFESSIONAL DEVELOPMENT PLAN

8.1. The purpose of professional learning in Collier County Public Schools (CCPS) is to increase student achievement through staff development of teachers and staff, enhance classroom instructional strategies that promote rigor and relevance throughout the curriculum, and prepare students for continuing education and entry into the global marketplace. The school district not only has the responsibility for the continuous professional growth of its teachers and staff, but also has the obligation to ensure that appropriate professional learning opportunities are provided for major initiatives.

The comprehensive staff development system is designed primarily to ensure that major district initiatives, identified through school board priorities, the superintendent's goals, and the needs addressed in school improvement plans and 3-year Academic Plan are successful. The system was developed and based upon multiple sources of needs assessment including principal interviews, school staff and community input, school improvement plan achievement analysis, school/district discipline data, climate surveys and employee performance appraisal data. The success of the comprehensive staff development program is largely dependent upon the degree of collaboration among central office departments in focusing services and training provided to schools and teachers across the district. Content specific curriculum directors, supervisors, and coordinators assist the schools and district in providing scientific-based educational activities that encourage and motivate students to achieve at the highest levels and to participate as active learners for success at subsequent educational levels and the workforce.

The focus of district-wide staff development is to support school board priorities, the superintendent's goals, and district and school improvement initiatives. Currently, these initiatives include differentiated instruction, Response to Intervention (Multi-Tiered System of Supports), analysis of student achievement data including the use of formal and informal assessments, reading in the content area, integrated use of classroom technology, classroom management, school-to-career, parent involvement, and school safety. The 3-year Academic Plan outlines specific staff development to be provided in the district.

Released on May 5, 2011 from *learning forward* (formerly National Staff Development Council) are the Teacher Leader Model Standards, which mirror the philosophy of all professional learning in Collier County Public Schools:
Domain 1: Fostering a collaborative culture to support educator development and student learning

Domain 2: Accessing and using research to improve practice and student learning
Domain 3: Promoting professional learning for continuous improvement
Domain 4: Facilitating improvements in instruction and student learning

Domain 5: Promoting the use of assessments and data for school and district improvement

Domain 6: Improving outreach and collaboration with families and community

Domain 7: Advocating for student learning and the profession

Quality professional learning provides continuous support for all education professionals, as well as temporary, targeted intervention for education professionals who need improvement with knowledge, skills, and performance. Through the implementation of the Master In-service Plan, Collier County Public Schools will continue to raise the knowledge and skill level of all employees while making certain that highly effective, highly qualified teachers are available to meet identified instructional needs.

Provisions for increasing the use of technology in the classroom and media center are facilitated by:

- Development and acquisition of new programs and software that promote the integration of technology into everyday curricular needs;
- Integration of technology as a meaningful component within all curriculum training;
- District-level coordination of training and support;
- Ensuring adequate facilities, instructors, materials, equipment and funding for staff development; and
- Identification and acquisition of technology-based professional development delivery systems that minimize teacher time away from the classroom and delivery of training in the most cost-effective manner.

The Department of STEM Resources, Instructional Technology & Media Services is the organization primarily responsible for coordinating the development and execution of plans that deal with technology integration in the classroom. Four Instructional Technology Specialists are responsible for integrating instruction with technology. Because of the size of the District and the limited number of staff, it has been advantageous to also give each IT Specialist an area of specialization as it relates to software and other technologies. They become the District team to troubleshoot problems and contact vendors; work with the Information Technology Department, Facilities, and Maintenance; assist Curriculum & Instruction to develop workshops that include appropriate technology; and organize the schools to receive and use the technologies to improve teaching and learning.

The Department of STEM Resources, Instructional Technology & Media Services also oversees the development of the media program. Online reference materials, equipment needs, and training for media specialists are provided. The media specialists group meets during the school year for training, development of curriculum programs and sharing of information.

The department writes grants in collaboration with Curriculum & Instruction and schools to secure funds to provide software, equipment, and training that support instruction in the classroom. Data from these projects are collected and analyzed. Programs of merit are then considered for district implementation.

Technical assistance is available to teachers and administrators. Each school has access to a System Support Technician (SST) who maintains the computers, instructional and administrative network, and the instructional and administrative software.

The Information Technology Department provides training in management and productivity tools to support school and central office staff. The Technology Trainer for the District has ongoing in-service in TERMS, Microsoft Outlook and Microsoft Office. The Help Desk staff also assists individuals with questions concerning technology issues.

Training formats for all professional learning include the following:

- Face to face training at the school site during planning time or before or after school
- Face to face training with collective schools at an identified site during the school day or after school
- Train the trainer where selected staff receive face to face training and are required to provide the same training to others at their school site
- Ongoing staff development whereby a commitment to participate is made to participate for a designated number of hours throughout the year
- Online professional development through ANGEL, videoconferencing and webinars
- Online videos and tutorials
- Summer institutes
- Attendance at conferences such as FETC to bring new technologies and instructional ideas to the District

One of the most significant projects has been the Classroom Technology Enhancement project. Every school has the following equipment: a video projector, a document camera, a sound amplification system, and an interactive whiteboard. Each spring the schools' Building Technology Coordinators (BTCs) provide the District with a spreadsheet that contains information on the condition of the above

equipment. In this way, equipment that is failing can be replaced, as District budget permits. The Classroom Technology Enhancement project is an integral part of daily instruction in Collier schools. The Building Technology Coordinator (BTC) is a supplemental position for a teacher who helps to make sure that technology needs are addressed. The BTC also is responsible for completing the Florida Innovates Survey. The BTC group meets during the school year for training and information sharing.

Projects for School Year 2014-2015 support the District's Strategic Plan, Superintendent's goals, Three Year Academic Plan and Race To The Top deliverables.

Focus areas include:

- Increased ANGEL usage to support teaching and learning
- Integration of interactive whiteboard devices such as Mimio and Mobi
- Mobile technologies to engage students with academic content.
- Continue to phase in BYOD programs at each school level (elementary, middle and high school) to include developing BYOD guidelines, policy and professional learning
- Continue to investigate mobile learning tools through the Technology Platform Test (TPT)
- Evaluate current standards of classroom technology equipment and provide recommendations for future needs
- Continue to research optimal learning environments for online courses through identification of successful programs/courses, student schedules, and computer lab configurations
- Continue the implementation of the iPortfolio platform schools to showcase student virtual artifacts/learning outcomes
- Video-on-demand to support professional development
- Video editing to enhance Information, Communication, and Technology (ICT) Skills
 - TV production at all levels
 - High School TV Production course
- Web 2.0 tools to increase collaboration and critical thinking skills among staff and students

8.2. A list of sources of ongoing training and technical assistance available to teachers and administrators served by the District, such as State technology offices, intermediate educational support units, regional education training facilities or institutions of higher learning.

Below is a list of facilities, higher education, and state offices that the District uses for support:

- Bureau of Instruction and Innovation
- Department of Educational Technology
- Florida Diagnostic and Learning Resources System
- Florida Digital Educators
- Florida Gulf Coast University
- University of Central Florida
- University of Florida
- The Conservancy of Southwest Florida
- The Florida Virtual School
- Lorenzo Walker Institute of Technology
- International Society for Technology in Education

9. PROGRAM EVALUATION

Technology related programs will be evaluated at least twice per year to address According to Florida Statute 1012.98, CCPS must provide for the continuous evaluation of the quality and effectiveness of professional learning programs including instructional technology in order to expand effective programs and strategies and to eliminate ineffective ones. The District monitors professional development data to make certain that all activities are aligned with Florida's Professional Development Protocol and the *learningforward* (formerly, National Staff Development) Standards. In order to ensure continuous improvement, the district encourages summative study of major professional development through formal program evaluation that considers all of Guskey's levels of evaluation (Evaluating Professional Development, 2000) including: participant's reactions (*satisfaction*), participant's knowledge (*acquisition of knowledge*), organizational support and change (*implementation context*), participant's use of new knowledge and skills (*utilization and skill building*) and student learning outcomes (*accomplishment of specified achievement goal(s)*). Through this comprehensive study, decisions can be made regarding program continuation, revision and/or elimination. This broad review assists decision makers in discovering any unintended outcomes/consequences that may be related to professional development programs. Program evaluation in Collier County is conducted following the CCPS District Evaluation Procedures. In addition to providing program history and goals, essential questions addressed in the evaluations include:

- Are our program goals and objectives appropriate as determined by the needs of the students in our district?
- What are the goals and objectives of similar programs?
- How do our program goals and objectives compare with the goals and objectives of similar programs?
- What evidence is there that similar programs have accomplished or not accomplished their goals and objectives?
- What are the major implementation strategies that have been successful?
- What are the barriers to successful implementation or the continuation of the implementation?
- How does our District's implementation compare with the more successful implementations, and how has our implementation overcome the barriers?

Relevant data, including course evaluations, participant feedback, and student performance data are utilized when considering the efficacy of programs. In addition, information regarding the fiscal impact of professional learning programs is considered. Upon completion of the program evaluation, an action plan is created and its implementation is monitored by Curriculum and Instruction as well as Information

Technology staff. Annually, the school district's technology committee identifies specific software programs and hardware equipment that will be included within the district's program evaluation cycle. Programs included in the evaluation cycle support the Superintendent's Goals as well as the Assistant Superintendent of Curriculum & Instruction's Three-year Academic Plan.

Technology Equipment Sample Evaluation Question Format:

1: The Classroom Presentation Technology changes the way I teach by providing new innovative ways for me to present my lessons.

2: The Classroom Presentation Technology allows me to make my lessons more visually and audibly interesting to my students.

3: The Classroom Presentation Technology allows me to incorporate many types of media into my lessons.

4: My students are all able to hear more clearly because of the audio enhancement system.

5: The Classroom Presentation Technology saves me time when teaching a lesson by allowing the whole class to view a website or document together.

6: The Classroom Presentation Technology helps me with effective classroom management by allowing quick display of exercises and assignments.

7: Projecting activities and projects on the board encourages students to learn, discuss and discover collaboratively.

8: Use of the audio and visual technology by students enhances their presentations.

9: Students are more engaged during instruction because I am able to use a wider variety of media during my lessons.

10: The Classroom Presentation Technology provides children with disabilities in vision and hearing an improved environment for learning.

11: By using the microphone for audio enhancement I am less tired at the end of the day; I don't have to exhaust myself by talking loudly.

12: I use the video projector in my classroom.

13: I use the mimio in my classroom.

14: I use the teacher microphone when I instruct in my classroom.

15: I use the document camera in my classroom.

Software Preview Rubric

Software Title: _____

Presenter: _____

Please evaluate the program based on the following rubric.

	Level 0	Level 1	Level 2	Level 3	Score
Content	No attempt made to address NGSSS or CCSS.	Some evidence of standards alignment with content.	Standards are aligned well to content.	Standards are well aligned and effort is made to integrate content areas.	
Scope	The software targets one group of the intended audience.	The software is intended for the middle quartiles of students but cannot be used for Special Education purposes.	The software addresses all levels of students from low to high achieving but information does not adequately cover topics.	The software addresses all levels of students from low to high achieving and information adequately covers topics.	
Progression	There is no logical progression of topics.	There is a logical progression of topics but mastery level cannot be easily changed.	There is a logical progression of topics and mastery level can be easily changed, but the teacher cannot control the order of student work.	There is a logical progression of topics, and mastery level and the order of student work can be easily controlled by the teacher.	
Critical Thinking	No attempt made to provide higher-level questions or activities that apply critical thinking.	Some evidence of critical thinking questions or activities but program is primarily at the remembering/understanding levels.	Critical thinking questions or activities are evident.	Critical thinking questions or activities are evident and students are required to develop projects that apply these thinking strategies.	
Application	There is no evident connection between the software and application of skills.	There is little connection between the software and application of skills; activities are primarily for practice.	The software contains activities which require application of skills as well as practice.	The software contains activities which require application of skills as well as practice and also includes real-world projects that are completed using included computer tools.	
Engagement	No attempt is made to engage students.	Some evidence of student interactivity with program is shown.	Students find program engaging and are motivated to complete tasks.	Students are engaged, motivated, and have choice within the program.	
Management	No evidence of	Teachers can place	Teachers can	Teachers can	

of Student Activities	a management system.	students in a class to access software.	place students in a class to access specific activities within the software.	search by standards to identify appropriate activities and assign these activities to the students. OR Software diagnoses and prescribes appropriate activities based upon student data.	
Teacher Navigation	Difficult to learn and manipulate.	Fairly simple to learn and manipulate but rigid and unchangeable .	Simple to learn and manipulate but outside the teacher's capability to customize.	Simple to learn and operate and can be easily customized to meet individual needs.	
Student Navigation	Difficult to learn and manipulate.	Fairly simple to learn and manipulate.	Simple to learn and manipulate.	Simple to learn and manipulate. Students may be limited to this application only.	
Skills mastery monitoring	Students and teachers are unable to monitor skills mastery.	Students and teachers are able to monitor when a skill has been mastered.	Students and teachers are notified when progress is made on a skill.	Students and teachers are able to see ongoing progress in the mastery of each skill.	
Management of misconceptions	Students can progress through the program by simply pressing a button.	Students are told when their answers are right or wrong.	Students receive feedback on incorrect answers.	Students receive feedback and reteaching on incorrect answers, and may not progress until an answer is correct.	
ELL Components	English only	English and Spanish with sound	English, Spanish and Haitian Creole with sound	Multiple Languages	
Adaptiveness	Does not adapt to student responses.	Adapts to student responses minimally.	Continuously adapts to student responses; multiple pathways are accepted.	Continuously adapts to student responses; multiple pathways are accepted; the program teaches, reinforces and customizes the lesson.	
Assessment	Each unit has one summative assessment.	Each unit has a pretest and post-test.	Each unit has a pretest, post-test and interim formative assessments.	Each unit has a pretest, post-test and interim formative assessments; the program adapts the instruction to student responses on the assessments (artificial	

				intelligence).	
Administrative access	District administrators are unable to access school activity.	District administrators are able to see activity by district.	District administrators are able to see activity by district, school and teacher.	District administrators are able to see activity by district, school, teacher, classroom and individual student.	
Virtual tools	The program has no virtual tools.	The program has some virtual tools (such as highlighter, underline option).	The program has numerous virtual tools.	The program has numerous virtual tools which are aligned with the content of the course (such as protractors, rulers).	
Total Score					

Considerations	Comments
Initial cost	
Recurring costs (hosting, updates, maintenance, etc.)	
Licensing agreement (school vs. district)	
Training costs	
Ongoing training support	
Targeted audience (grade level, skill level, special subgroups)	
Diverse learner support (audio-visual, other languages, etc.)	
Special technology setup considerations	
Single sign-on capability	

Data Warehouse interactivity	
Data reporting options (student, teacher, district)	
Reporting features (graphs, charts, etc.)	

Comments:

10. E-RATE PLANNING CRITERIA

10.1. Telecomm Services, Internet Access

The District has requested eRate funding for Telecommunications Services and Internet Access for the 2014-2015 school year. If funding is approved, this will allow the District to fund phone lines, internet access, and wide area network connections at a very significant discount. The business department has allocated the necessary budget to fund telecommunications and internet access for the District. If eRate funding is approved, the District will be reimbursed for these costs in accordance with the program's procedures.

10.2. Form 471 – Discount Calculation Worksheet

1	2	3	4	5	6	7	8	9	10	11
Name of Eligible Entity	Entity Number AND NCES Code (for Schools) or FSCS Code (for Libraries)	Urban or Rural U or R	Total Number of Students	Number of Students Eligible for NSLP	Percent of Students Eligible for NSLP (Col. 5 / Col. 4)	Disc. from Disc. Matrix	New Construction	Admin Entity or NIF	Alt Disc Mech	Weighted Product for Calculating Shared Discount (Col. 4 x Col. 7)
ALL ENTITIES			SCHOOLS AND LIBRARIES							Schools with shared services
AVALON ELEMENTARY SCHOOL	38356	U	517	486	94%	90%				465.3
BARRON COLLIER HIGH SCHOOL	38353	U	1703	494	29%	50%				851.5
BEACON HIGH SCHOOL	16068318	U	311	209	67%	80%				248.8
BIG CYPRESS ELEMENTARY SCHOOL	38374	U	883	508	58%	80%				706.4
BIG CYPRESS WILDERNESS INST.		R	30	30	100%	90%				27
CALUSA PARK ELEMENTARY SCHOOL	228990	U	909	585	64%	80%				727.2
COLLIER JUVENILE DETENTION CTR		R	9	9	100%	90%				8.1
COLLIER VIRTUAL INSTRUCTION PR	16068319	U	28	2	7%	40%				11.2
CORKSCREW ELEMENTARY SCHOOL	38373	R	650	285	44%	70%				455
CORKSCREW MIDDLE SCHOOL	228284	R	691	355	51%	80%				552.8

CYPRESS PALM MIDDLE SCHOOL	16049340	R	777	475	61%	80%				621.6
EAST NAPLES MIDDLE SCHOOL	38346	U	1062	779	73%	80%				849.6
EDEN PARK ELEMENTARY SCHOOL	16049336	R	736	730	99%	90%				662.4
ESTATES ELEMENTARY SCHOOL	16027057	R	601	461	77%	90%				540.9
EVERGLADES CITY SCHOOL	38379	R	183	121	66%	80%				146.4
GOLDEN GATE ELEMENTARY SCHOOL	38363	U	948	917	97%	90%				853.2
GOLDEN GATE HIGH SCHOOL	16027056	U	1635	1206	74%	80%				1308
GOLDEN GATE MIDDLE SCHOOL	38367	U	1047	936	89%	90%				942.3
GOLDEN TERRACE ELEMENTARY SCHOOL	38368	U	1019	934	92%	90%				917.1
GULF COAST ACADEMY CHARTER		U	323	20	6%	40%				129.2
GULF COAST HIGH SCHOOL	168638	U	1963	459	23%	50%				981.5
GULFVIEW MIDDLE SCHOOL	38340	U	670	267	40%	60%				402
HIGHLANDS ELEMENTARY SCHOOL	38381	R	686	658	96%	90%				617.4
IGENERATION EMPOWERMENT ACADEMY		R	108	10	9%	50%				54
IMMOKALEE COMMUNITY SCHOOL		R	240	240	100%	90%				216
IMMOKALEE HIGH SCHOOL	38383	R	1383	1268	92%	90%				1244.7
IMMOKALEE MIDDLE SCHOOL	38382	R	786	753	96%	90%				707.4
IMMOKALEE TEEN PARENTING PROG	187471	R	59	50	85%	90%				53.1
LAKE PARK ELEMENTARY SCHOOL	38338	U	502	233	46%	60%				301.2
LAKE TRAFFORD ELEMENTARY SCHOOL	38380	R	738	724	98%	90%				664.2
LAUREL OAK ELEMENTARY SCHOOL	38372	U	798	185	23%	50%				399
LELY ELEMENTARY	38360	U	712	539	76%	80%				569.6

SCHOOL										
LELY HIGH SCHOOL	38359	U	1500	1030	69%	80%				1200
LORENZO WALKER TECHNICAL HIGH		U	573	426	74%	80%				458.4
MANATEE ELEMENTARY SCHOOL	38361	R	790	745	94%	90%				711
MANATEE MIDDLE SCHOOL	38362	R	868	791	91%	90%				781.2
MARCO ISLAND ACADEMY	16072922	R	163	2	1%	50%				81.5
MARCO ISLAND CHARTER MIDDLE		R	452	118	26%	60%				271.2
MIKE DAVIS ELEMENTARY SCHOOL	16049341	U	795	750	94%	90%				715.5
NAPLES AREA TEENAGE PARENTING	177634	U	49	42	86%	90%				44.1
NAPLES HIGH SCHOOL	38337	U	1648	697	42%	60%				988.8
NAPLES PARK ELEMENTARY SCHOOL	38349	U	595	380	64%	80%				476
NEW BEGINNINGS - NAPLES	212175	U	46	40	87%	90%				41.4
NEW BEGINNINGS IMMOKALEE	228989	U	20	20	100%	90%				18
NORTH NAPLES MIDDLE SCHOOL	16027058	U	948	308	32%	50%				474
OAKRIDGE MIDDLE SCHOOL	38371	U	1039	350	34%	50%				519.5
OSCEOLA ELEMENTARY SCHOOL	228992	U	700	315	45%	60%				420
PALMETTO ELEMENTARY SCHOOL	16049337	U	529	363	69%	80%				423.2
PALMETTO RIDGE HIGH SCHOOL	16027048	R	1820	885	49%	70%				1274
PARKSIDE ELEMENTARY SCHOOL	16049338	U	726	709	98%	90%				653.4
PELICAN MARSH ELEMENTARY SCHOOL	38343	U	802	266	33%	50%				401
PINE RIDGE MIDDLE SCHOOL	38352	U	1022	385	38%	60%				613.2
PINECREST ELEMENTARY SCHOOL	38386	R	810	800	99%	90%				729

POINCIANA ELEMENTARY SCHOOL	38293	U	735	529	72%	80%				588
SABAL PALM ELEMENTARY SCHOOL	234276	R	595	384	65%	80%				476
SEA GATE ELEMENTARY SCHOOL	38342	U	817	250	31%	50%				408.5
SHADOWLAWN ELEMENTARY SCHOOL	38355	U	549	492	90%	90%				494.1
THE PACE PROGRAM		U	58	58	100%	90%				52.2
THE PHOENIX PROGRAM NAPLES		U	64	49	77%	90%				57.6
THE PHOENIX PROGRAM- IMMOKALEE		U	26	24	92%	90%				23.4
TOMMIE BARFIELD ELEMENTARY SCHOOL	38389	U	598	209	35%	60%				358.8
VETERANS MEMORIAL ELEMENTARY SCHOOL	16049339	U	856	307	36%	60%				513.6
VILLAGE OAKS ELEMENTARY SCHOOL	38388	R	721	695	96%	90%				648.9
VINEYARDS ELEMENTARY SCHOOL	38370	U	789	303	38%	60%				473.4
SCHOOL DISTRICTS: (Including groups of schools within school districts.) Calculate the totals of Columns 4 and 11. Divide the total of Column 11 by the total of Column 4. Enter the result in Column 15.			44410						32623	73%

Appendix A – District Technology Standards by Level

School Level	Student Computer	Teacher Computer	Student Laptops	Mobile Lab	Video Projector	DVD/VCR	Document Camera	Mimio	Classroom B/W Printer	Heavy Use Color Printer	VOIP 2-line
Elementary School	2.8:1	1	0	170:1	1	1	1	1	1	0.25	1
Middle School	2.9:1	1	0	170:1	1	1	1	1	1	0.25	1
High School	3.5:1	1	0	170:1	1	1	1	1	1	0.25	1

Appendix B – District Needs Assessment for 2013-2014

District needs as of October 2013

Item	Quantity	Price	Total Cost
Scanner	50	\$239.00	\$ 11,950.00
Digital Cameras	239	\$110.99	\$ 27,747.50
Microphones	176	\$7.20	\$ 1,267.20
Headsets Option 1	2,862	\$10.66	\$ 30,508.92
Headsets Option 2	1,831	\$17.50	\$ 32,042.50
Headsets with microphones	807	\$13.00	\$ 10,491.00
Software needs (combined)	-	Various	\$ 500,000.00
PC Replacements	3000	\$400	\$ 1,200,000.00
Monitor Replacement	11,000	Various	\$ 1,430,000.00
Laptop Replacement	1,000	\$825	\$ 825,000.00
Growth Classroom PC's	n/a	Various	\$ 125,000.00

District needs are estimates based on the Needs Assessment per school. Not all equipment will be purchased. Equipment is prioritized based on what is most important.

Appendix C – Student/Teacher/Administrator Technology Standards

The ISTE National Educational Technology Standards (NETSoS) and Performance Indicators for Students

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

The **ISTE** **National Educational Technology Standards (NETSoT)** **and Performance Indicators for Teachers**

Effective teachers model and apply the National Educational Technology Standards for Students (NETSoS) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

- a. promote, support, and model creative and innovative thinking and inventiveness
- b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETSoS. Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

- b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

- a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
- d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

- a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
- c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

The ISTE

National Educational Technology Standards (NETSoS) and Performance Indicators for Administrators

The NETS for Administrators builds on the work of the Technology Standards for School Administrators (TSSA) Collaborative, where ISTE had a leading role in developing these standards. The NETS•A embraces the TSSA vision and extends it to additional administrative job roles. These standards are indicators of effective leadership for technology in schools. They are a national consensus among educational stakeholders of what best indicates effective school leadership for comprehensive and appropriate use of technology in schools.

I. Leadership and Vision

Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.

Educational leaders:

- A. facilitate the shared development by all stakeholders of a vision for technology use and widely communicate that vision.
- B. maintain an inclusive and cohesive process to develop, implement, and monitor a dynamic, long-range, and systemic technology plan to achieve the vision.
- C. foster and nurture a culture of responsible risk-taking and advocate policies promoting continuous innovation with technology.
- D. use data in making leadership decisions.
- E. advocate for research-based effective practices in use of technology.
- F. Advocate on the state and national levels for policies, programs, and funding opportunities that support implementation of the district technology plan.

II. Learning and Teaching

Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching.

Educational leaders:

- A. identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.
- B. facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.
- C. provide for learner-centered environments that use technology to meet the individual and diverse needs of learners.
- D. facilitate the use of technologies to support and enhance instructional methods that develop higher-level thinking, decision-making, and problem-solving skills.
- E. provide for and ensure that faculty and staff take advantage of high-quality

professional learning opportunities for improved learning and teaching with technology.

III. Productivity and Professional Practice

Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others. Educational leaders:

- A. model the routine, intentional, and effective use of technology.
- B. employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community.
- C. create and participate in learning communities that stimulate, nurture, and support faculty and staff in using technology for improved productivity.
- D. engage in sustained, job-related professional learning using technology resources.
- E. maintain awareness of emerging technologies and their potential uses in education.
- F. use technology to advance organizational improvement.

IV. Support, Management, and Operations

Educational leaders ensure the integration of technology to support productive systems for learning and administration. Educational leaders:

- A. develop, implement, and monitor policies and guidelines to ensure compatibility of technologies.
- B. implement and use integrated technology-based management and operations systems.
- C. allocate financial and human resources to ensure complete and sustained implementation of the technology plan.
- D. integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources.
- E. implement procedures to drive continuous improvement of technology systems and to support technology replacement cycles.

V. Assessment and Evaluation

Educational leaders use technology to plan and implement comprehensive systems of effective assessment and evaluation. Educational leaders:

- A. use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communication, and productivity.
- B. use technology to collect and analyze data, interpret results, and communicate findings to improve instructional practice and student learning.
- C. assess staff knowledge, skills, and performance in using technology and use results to facilitate high-quality professional development and to inform personnel decisions.
- D. use technology to assess, evaluate, and manage administrative and operational systems.

VI. Social, Legal, and Ethical Issues

Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision making related to these issues. Educational leaders:

- A. ensure equity of access to technology resources that enable and empower all learners and educators.

- B. identify, communicate, model, and enforce social, legal, and ethical practices to promote responsible use of technology.
- C. promote and enforce privacy, security, and online safety related to the use of technology.
- D. promote and enforce environmentally safe and healthy practices in the use of technology.
- E. participate in the development of policies that clearly enforce copyright law and assign ownership of intellectual property developed with district resources.

Appendix D – Sample of Florida Educators Accomplished Practices and Marzano Teacher Evaluation Model



Florida Department of Education Support for Local Education Agencies

FEAPS Crosswalk to Marzano Art and Science of Teaching

a) Quality of Instruction

1. Instructional Design and Lesson Planning. Applying concepts from human development and learning theories, the effective educator:

INSTRUCTIONAL DESIGN AND LESSON PLANNING	DOMAIN 2: PLANNING AND PREPARING	DOMAIN 1: CLASSROOM STRATEGIES AND BEHAVIORS	DOMAIN 3: REFLECTING ON TEACHING	DOMAIN 4: COLLEGIALLY AND PROFESSIONALISM
<p>1a Aligns instruction with state-adopted standards at the appropriate level</p>	<p>2.1 Planning and Preparing for Lessons and Units</p> <p>2.1.1 Planning and preparing for effective scaffolding within lessons</p> <p>2.1.2 Planning and preparing for lessons within units that progress toward a deep understanding and transfer of content</p> <p>2.1.3 Planning and preparing for appropriate attention to established content standards</p> <p>2.2 Planning and Preparing for the Use of Materials and Technology</p> <p>2.2.1 Planning and preparing for the use of available traditional resources for upcoming units and lessons (e.g., manipulatives, video tapes)</p> <p>2.2.2 Planning for the use of available technology such as interactive white boards, voting technologies and one-to-one computer</p>			

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Florida Department of Education Support for Local Education Agencies

FEAPS Crosswalk to Marzano Art and Science of Teaching
 a) Quality of Instruction

1. Instructional Design and Lesson Planning. Applying concepts from human development and learning theories, the effective educator:

INSTRUCTIONAL DESIGN AND LESSON PLANNING	DOMAIN 2: PLANNING AND PREPARING	DOMAIN 1: CLASSROOM STRATEGIES AND BEHAVIORS	DOMAIN 3: REFLECTING ON TEACHING	DOMAIN 4: COLLEGIALLY AND PROFESSIONALISM
1b Sequences lessons and concepts to ensure coherence and required prior knowledge	2.1 Planning and Preparing for Lessons and Units 2.1.1 Planning and preparing for effective scaffolding within lessons 2.1.2 Planning and preparing for lessons within units that progress toward a deep understanding and transfer of content 2.1.3 Planning and preparing for appropriate attention to established content standards	Routine Events RE 1 Providing clear learning goals and scales RE 2 Tracking student progress RE 3 Celebrating success		
1c Designs instruction for students to achieve mastery	2.2 Planning and Preparing for Use of Materials and Technology 2.2.1 Planning and preparing for the use of available traditional resources for upcoming units and lessons (e.g., manipulatives, video tapes) 2.2.2 Planning for the use of available technology such as interactive white boards, voting technologies and one-to-one computer	Content C 2 Organizing students to interact with new knowledge C 10 Organizing students to practice and deepen knowledge C 16 Organizing students for cognitively complex tasks		

Appendix E – Historical General Introduction / Background info

- **2009-2010** The District will continue the initiatives begun in 2008-2009
 - ANGEL Learning Management System training will continue to grow so staff will have more opportunities to learn how to use the Learning Object Repository, receive online staff development, and attend virtual meetings.
 - Video conferencing will continue to be used to deliver high school courses, for trainings, and for meetings.
 - SILK will be used as the course scheduler replacing the scheduler in TERMS for Elementary schools.
 - The District will maintain all classroom enhancement technology including the video projectors, document cameras, sound enhancement systems, and interactive whiteboards.
 - Increased use of video, class response systems and interwrite mobi boards will be monitored to determine future investments in these areas. Update of the TV Studios at twenty sites with the Tricaster system.
 - Video storage, retrieval, and accountability of use through the Accordent system will be implemented.
 - Disaster Recovery will continue to be enhanced through remote replication of Data to remote storage devices and servers.
 - Aging PCs over 5 years old will be replaced with new technology.
 - Fiber Optic network will continue to be enhanced.
 - Software delivery and standardization will continue to be enhanced through expanded use of Application Virtualization throughout the District. Virtually Every PC will have access to the SoftGrid Application Virtualization environment which allows anywhere, anytime delivery of software applications.
 - Standardization of software titles across all schools will be a priority in order to allow equal access to all types of instructional and productivity software across the District.
 - Internet Access and Connectivity will continue to be enhanced through the use of the most cost effective and efficient internet access locations.
 - Security of Wireless LAN (Local Area Network) will continue to be enhanced.
 - 1 to 1 laptop initiatives will be reevaluated as needed based on budgetary considerations.

- **2010-2011** The District will continue the initiatives begun in 2009-2010
 - Aging Desktops and Laptops that are over 5 years old will be replaced according to the replacement schedule. This will include approximately 4,000 computers.

- ANGEL Learning Management System training will continue to grow so staff will have more opportunities to learn how to use the Learning Object Repository, receive online staff development, and attend virtual meetings.
- Video conferencing will continue to be used to deliver high school courses, for trainings, and for meetings.
- SILK will continue to be enhanced and used as the District's course scheduler.
- The District will replace all classroom enhancement technology including the video projectors, document cameras, sound enhancement systems, and interactive whiteboards as the equipment becomes unserviceable.
- Increased use of video, class response systems and Interwrite mobi boards will be monitored to determine future investments in these areas.
- Video storage, retrieval, and accountability of use through the Accordent system will continue to be implemented as the District moves more video on demand content into Accordent.
- Disaster Recovery will continue to be enhanced through remote replication of Data to remote storage devices and servers.
- Fiber Optic network will continue to be enhanced as the Fiber Optic Network has been completed to Tommie Barfield Elementary and Everglades City School. The remaining alternative sites will be connected and the Fiber Optic network will be maintained and relocated as road construction projects demand.
- Software delivery and standardization will continue to be enhanced through expanded use of Desktop Management and Application Virtualization throughout the District. Zenworks Configuration Management will allow the standardization of virtualized and traditional applications and for these applications run side by side in the same environment. Consolidation of virtualized and traditional applications will occur for the ease of teachers and students in locating applications. All PCs have access to virtualized and traditional applications which allow anywhere, anytime delivery of software applications throughout the District.
- Standardization of software titles across all schools will be a priority in order to allow equal access to all types of instructional and productivity software across the District.
- Internet Access will continue to be upgraded as budgets allow. Over the past year the District moved from 400 Mb of internet access to 1.3 Gb, a 300% increase, with virtually no increase in cost. Internet Access and Connectivity will continue to be enhanced through the use of the most cost effective and efficient internet access locations.
- Security of Wireless LAN (Local Area Network) will continue to be enhanced and new security protocols will be implemented.

- 1 to 1 laptop initiatives will be reevaluated as needed based on budgetary considerations and in accordance with the District's overall technology plan.
- Server consolidation and replacement on virtualized servers will continue as the District moves closer to the goal of 90% of all servers being virtual. This will massively reduce power consumption while increasing uptime for network applications.
- **2011-2012** The District will implement the following initiatives
 - Aging Desktops and Laptops that are over 5 years old will be replaced according to the replacement schedule. This will include approximately 3,000 computers.
 - ANGEL Learning Management will be simplified and customized according to the age of the end user. Learning Object Repositories and online staff development content will continue to grow.
 - District Technology Committee will research and recommend an electronic textbook pilot implementation project
 - Mobile devices for instructional purposes will be piloted in the areas of STEM, literacy, and assistive technology.
 - The concept of "Flipped Classroom" will be piloted utilizing technology as a means of delivering lecture-style content outside of the school day. Students will then be immersed in project-based learning activities during the school day as well as receive any necessary differentiated instruction.
 - Elementary and middle school science will use a technology-based core science book from Discovery Education.
 - Adobe Connect sessions will continue to be utilized as a means of conducting staff development webinars and district-level meetings.
 - To support elementary standards-based progress reporting, the Department of Staff Development, Instructional Technology & Media Services as well as the elementary Instructional Resource (IR) teachers will develop a curriculum map based upon the ISTE-NETS S technology standards, including unit essential questions and touchstone projects to guide instruction.
 - Video conferencing will continue to be used to deliver high school courses, trainings, staff development, and for meetings.
 - SILK will continue to be enhanced and used as the District's course scheduler.
 - The District will replace all classroom enhancement technology including the video projectors, document cameras, sound enhancement systems, and interactive whiteboards as the equipment becomes unserviceable.
 - Increased use of video, class response systems and Interwrite mobi boards will be monitored to determine future investments in these areas.

- Video storage, retrieval, and accountability of use through the Accordent system will continue to be enhanced as the District moves more video on demand content into Accordent.
- Disaster Recovery will continue to be enhanced through remote replication of Data to remote storage devices and servers.
- Fiber Optic network will continue to be enhanced as the network has been connected to all schools except one alternative site. This site will be connected to the Fiber Optic network this year to ensure equitable access to technology resources for all students. In addition, there are at least two major road construction projects which will require relocation of portions of the network. This work will be completed in accordance with the requirements of these projects and the network will continue to be maintained and enhanced as required.
- Software delivery and standardization will continue to be enhanced through expanded use of Desktop Management and Application Virtualization throughout the District. Zenworks Configuration Management will allow the standardization of virtualized and traditional applications and for these applications run side by side in the same environment. Consolidation of virtualized and traditional applications will occur for the ease of teachers and students in locating applications. All PCs have access to virtualized and traditional applications which allow anywhere, anytime delivery of software applications throughout the District.
- Standardization of software titles across all schools will be a priority in order to allow equal access to all types of instructional and productivity software across the District.
- Internet Access will continue to be enhanced and upgraded as budgets allow. The District currently has 1.3 Gigabits (Gbs) of internet bandwidth which is heavily utilized daily. Currently during school days, Internet usage is nearly 100% of capacity from the hours of 9:30 AM to 2:00 PM on school days. The internet filter works to ensure that this usage is instructional related. This level of internet usage provides evidence of immense technology usage throughout the District. Over the next year, the District's internet capacity will be reviewed and enhanced to allow the most efficient access. Internet Access and Connectivity will continue to be enhanced through the use of the most cost effective and efficient internet access locations.
- Security of Wireless LAN (Local Area Network) will continue to be enhanced and new security protocols will be implemented. Software will be updated on Access Points, centralized wireless controllers, and wireless environment management software. This will enhance connectivity and increase the District's ability to proactively troubleshoot any wireless coverage issues.

- The District has developed standards for desktop and notebook computers at the elementary, middle, and high school levels in order to ensure equitable access to technology throughout the District. These standards will be implemented as resources allow in this and future school years.
 - Server consolidation and replacement on virtualized servers will continue as the District moves closer to the goal of 90% of all servers being virtual. This will massively reduce power consumption while increasing uptime for network applications.
 - The District will upgrade software applications as resources allow including continuing the implementation of Office 2010 which was standardized on the Career and Technical Education areas during last school year and the upgrade of Exchange to 2010 from 2007.
 - Career and Tech Education labs throughout the District will be upgraded to the latest offerings of software such as: Adobe CS 5.5, AutoCAD 2012, and Office 2010.
 - Supporting the expansion of the Computer Programming course offerings in the High Schools by providing technology, software, and support.
 - Distribution of media encoders to schools that remain on coaxial infrastructure. This system will eliminate the cost associated with maintaining a coaxial infrastructure in all schools as it will no longer be required. A single cable TV feed will be maintained into the District.
- **2012-2013** The District will implement the following initiatives
 - Aging Desktops and Laptops that are over 5 years old will be replaced according to the replacement schedule. This will include approximately 4,500 computers.
 - ANGEL Learning Management will be simplified and customized according to the age of the end user. Learning Object Repositories and online staff development content will continue to grow.
 - The Technology Platform Test (TPT) project will continue to test mobile devices and provide recommendations to the District about devices. This project will continue to test devices with different types of users throughout the District.
 - District Technology Committee will continue to research and recommend an electronic textbook pilot implementation project. This will be conducted in combination with the research of mobile device platforms through the Technology Platform Test (TPT) project.
 - Mobile devices for instructional purposes will be piloted in the areas of STEM, literacy, and assistive technology.
 - A pilot will take place to evaluate the TERMS 2020 system from EDR. This system has the potential to provide graphical screens for many of the

green screen interfaces the District currently has. In addition, the system has greater on-demand report generation capabilities.

- The concept of “Flipped Classroom” will be piloted utilizing technology as a means of delivering lecture-style content outside of the school day. Students will then be immersed in project-based learning activities during the school day as well as receive any necessary differentiated instruction.
- A pilot plan will be created for electronic portfolios for students.
- Elementary and middle school science will use a technology-based core science book from Discovery Education.
- Adobe Connect sessions will continue to be utilized as a means of conducting staff development webinars and district-level meetings.
- Pilot Social Networking for teachers through the use of Edmodo.
- To support elementary standards-based progress reporting, the Department of Staff Development, Instructional Technology & Media Services as well as the elementary Instructional Resource (IR) teachers will refine and update as well as develop a curriculum map based upon the ISTE-NETS S technology standards, including unit essential questions and touchstone projects to guide instruction.
- Video conferencing will continue to be used to deliver high school courses, trainings, staff development, and for meetings.
- SILK will continue to be enhanced and used as the District's course scheduler.
- The District will replace all classroom enhancement technology including the video projectors, document cameras, sound enhancement systems, and interactive whiteboards as the equipment becomes unserviceable.
- Increased use of video, class response systems and Interwrite mobi boards will be monitored to determine future investments in these areas.
- Video storage, retrieval, and accountability of use through the SAFARI Montage system will continue to be enhanced as the District moves more video on demand content into the system.
- Disaster Recovery will continue to be enhanced through remote replication of Data to remote storage devices and servers.
- Fiber Optic network will continue to be enhanced as the network has been connected to all schools except one alternative site. This site will be connected to the Fiber Optic network this year to ensure equitable access to technology resources for all students. In addition, there are at least two major road construction projects which will require relocation of portions of the network. This work will be completed in accordance with the requirements of these projects and the network will continue to be maintained and enhanced as required.
- Software delivery and standardization will continue to be enhanced through expanded use of Desktop Management and Application Virtualization throughout the District. Zenworks Configuration

Management will allow the standardization of virtualized and traditional applications and for these applications run side by side in the same environment. Consolidation of virtualized and traditional applications will occur for the ease of teachers and students in locating applications. All PCs have access to virtualized and traditional applications which allow anywhere, anytime delivery of software applications throughout the District.

- Standardization of software titles across all schools will be a priority in order to allow equal access to all types of instructional and productivity software across the District.
- Internet Access will continue to be enhanced and upgraded as budgets allow. The District will have greater capabilities with 2 Gbs of internet bandwidth capability during the school year. The District currently has 1.3 Gigabits (Gbs) of internet bandwidth which is heavily utilized daily. Currently during school days, Internet usage is nearly 100% of capacity from the hours of 9:30 AM to 2:00 PM on school days. The internet filter works to ensure that this usage is instructional related. This level of internet usage provides evidence of immense technology usage throughout the District. Internet Access and Connectivity will continue to be enhanced through the use of the most cost effective and efficient internet access locations.
- Security of Wireless LAN (Local Area Network) will continue to be enhanced and new security protocols will be implemented. Software will be updated on Access Points, centralized wireless controllers, and wireless environment management software. School maps will be imported to the management system which will allow the District to proactively troubleshoot any wireless coverage issues.
- The District has developed standards for desktop and notebook computers at the elementary, middle, and high school levels in order to ensure equitable access to technology throughout the District. These standards will be implemented as resources allow in this and future school years.
- Server consolidation and replacement on virtualized servers will continue as the District moves closer to the goal of 90% of all servers being virtual. This will massively reduce power consumption while increasing uptime for network applications.
- The District will upgrade software applications as resources allow including continuing the implementation of Office 2010 which was standardized on the Career and Technical Education areas during last school year and the upgrade of Exchange to 2010 from 2007.
- Supporting the expansion of the Computer Programming course offerings in the High Schools by providing technology, software, and support.

- Distribution of media encoders to schools that remain on coaxial infrastructure. This system will eliminate the cost associated with maintaining a coaxial infrastructure in all schools as it will no longer be required. A single cable TV feed will be maintained into the District.
 - Existing data center battery backup (UPS) systems will be replaced with two 300KW units. This will greatly extend the available runtime, and ensure that critical district resources/applications remain online during an extended power outage.
 - Active Directory upgrade from server 2003 to 2008 will be completed. This will upgrade the forest functional level to 2008, enabling the district to leverage enhanced features and group policy functionality.
 - The district will continue to evaluate new VoIP mobility/productivity applications including but not limited to Cisco Jabber, SIP gateways in the district's disaster recovery facility, Cisco Emergency Responder, and Digital Fax Solutions
- **2013-2014** The District will implement the following initiatives
 - Aging Desktops and Laptops that are over 5 years old will be replaced according to the replacement schedule. This will include approximately 4,500 computers.
 - ANGEL Learning Management will be simplified and customized according to the age of the end user. Learning Object Repositories and online staff development content will continue to grow.
 - The Technology Platform Test (TPT) project will continue to test mobile devices and provide recommendations to the District about devices. This project will continue to test devices with different types of users throughout the District.
 - District Technology Committee will continue to research and recommend an electronic textbook pilot implementation project. This will be conducted in combination with the research of mobile device platforms through the Technology Platform Test (TPT) project.
 - Mobile devices for instructional purposes will continue to be implemented in the areas of STEM, literacy, and assistive technology.
 - A pilot will take place to evaluate the TERMS 2020 system from EDR. This system has the potential to provide graphical screens for many of the green screen interfaces the District currently has. In addition, the system has greater on-demand report generation capabilities.
 - The concept of "Flipped Classroom" will be piloted utilizing technology as a means of delivering lecture-style content outside of the school day. Students will then be immersed in project-based learning activities during the school day as well as receive any necessary differentiated instruction.

- Elementary and middle school science will use a technology-based core science book from Discovery Education. Beta-testing of a technology-based science book will be piloted at the high school level and a social studies book will be piloted at the middle school level.
- The District will implement a Bring Your Own Device (BYOD) Program at 11 Schools in August of 2013. Additional schools will be added in January of 2014. As a result the District will make changes to the wireless network including:
 - Addition of multiple SSIDs to increase network security
 - Device registration portal will ensure that all Wi-Fi enabled devices are associated with a user account
 - Wi-Fi coverage will be improved within each campus
- The District will begin using an electronic portfolio application called iPortfolio for students in grades 6-12 during the 2013-2014 school year. This system will allow students to create electronic portfolios of their work that they can use as a showcase for education and career needs.
- Adobe Connect sessions will continue to be utilized as a means of conducting staff development webinars and district-level meetings.
- Social Networking for teachers through the use of Edmodo.
- To support elementary standards-based progress reporting, the Department of Staff Development, Instructional Technology & Media Services as well as the elementary Instructional Resource (IR) teachers will refine and update as well as develop a curriculum map based upon the ISTE-NETS S technology standards, including unit essential questions and touchstone projects to guide instruction.
- Video conferencing will continue to be used to deliver high school courses, trainings, staff development, and for meetings.
- The District will replace all classroom enhancement technology including the video projectors, document cameras, sound enhancement systems, and interactive whiteboards as the equipment becomes unserviceable.
- Increased use of video, class response systems and Interwrite mobi boards will be monitored to determine future investments in these areas.
- Video storage, retrieval, and accountability of use through the SAFARI Montage system will continue to be enhanced as the District moves more video on demand content into the system.
- Disaster Recovery will continue to be enhanced through remote replication of Data to remote storage devices and servers.
- Aging network infrastructure (switches/routers) will be replaced with newer equipment. Many of the network switches in the school distribution closets are over 10 years old and are beginning to fail – these devices cannot provide current generation POE (power over Ethernet) capabilities for Access Points and IP based Surveillance cameras.

- District will aggressively work towards upgrading computers to Windows 7, as support for the Windows XP operating system will end in 2014.
- Software delivery and standardization will continue to be enhanced through expanded use of Desktop Management and Application Virtualization throughout the District. ZENworks Configuration Management version 11 will be deployed, enabling enhanced features and functionality.
- Standardization of software titles across all schools will be a priority in order to allow equal access to all types of instructional and productivity software across the District.
- Internet Access will continually be enhanced and upgraded. The District now has a physical internet connection of 10 Gigabits. The district has a Committed Information Rate (CIR) of 1 Gigabit of bandwidth, but now has the ability to burst to higher rates as needed during heavy utilization. Layer 7 filtering policies will be deployed, helping the district to restrict inappropriate content and comply with CIPA regulations.
- The District has developed standards for desktop and notebook computers at the elementary, middle, and high school levels in order to ensure equitable access to technology throughout the District. These standards will be implemented as resources allow in this and future school years.
- Server consolidation and replacement on virtualized servers will continue as the District moves closer to the goal of 90% of all servers being virtual. This will massively reduce power consumption while increasing uptime for network applications.
- The District has completed implementation of Office 2010, which is now the baseline standard software on all district computers. District will proceed with planned upgrade from Exchange 2007 to 2013.
- Supporting the expansion of the Computer Programming course offerings in the High Schools by providing technology, software, and support.
- A remaining 300KW data center battery backup (UPS) will be installed to displace a remaining 80KW unit. This will greatly extend the available runtime, and ensure that critical district resources/applications remain online during an extended power outage.
- Active Directory 2003 servers will be decommissioned and removed from the forest, allowing the district to complete the upgrade to 2008 Domain Controllers. The district will explore the possibility of upgrading to Server 2012 Domain Controllers, and begin testing this in development.
- The district will continue to evaluate new VoIP mobility/productivity applications including but not limited to Cisco Jabber, SIP gateways in the district's disaster recovery facility, Cisco Emergency Responder, and Digital Fax Solutions. CUCM (Cisco Unified Communications Manager) appliances will be patched to the latest versions.

- The district will implement DOE's web based Cost Reporting System which will be available for use beginning in school year 2014.
- The district will implement Health Management System which will be used by the district's health service providers beginning in school year 2014.
- The district will develop replacement software for its aged Position Control System.

6320 - PURCHASING

Procurement Procedures

All procurement of supplies, materials, equipment, and services paid for from School District funds shall be made in accordance with all applicable State statutes, Florida State Board of Education Rules, School Board policies, and administrative procedures.

Purchase Order Required

Each purchase shall be based upon a request originating from the principal or department head where the product or service is used. Each request, or agreement/contract, shall be properly financed, budgeted, and encumbered prior to the issuing of a purchase order. The Director of Purchasing, or his/her designee, may in an emergency, grant permission for the issuance of an emergency purchase order, which will be entered into the system and encumbered at that time. The payment of an unauthorized purchase shall be the sole responsibility of the person placing the order.

Personal Purchases and Commercial Services

No employee or school official of the Board shall be permitted to use bid prices or receive any preferential treatment in the making of personal purchases unless so offered by the vendor to all District employees. In the event of such an offer, vendor(s) should contact the human resources department to have employee pricing added to the District perk list. Any such offer shall not interfere or have bearing on any bid award.

Bidding

It is the policy of the Board that the Director of Purchasing or his/her designated representative shall be responsible for estimating needs for items in common use and making quantity purchases. All items, or group of related items that cost in excess of the amount defined in Florida State Board Administrative Rule F.A.C. 6A-1.012(7), except as authorized by Rule F.A.C. 6A-1.012, shall be purchased based on competitive bids.

Lobbying

Bidders/Proposers are hereby advised that lobbying is not permitted with any District personnel or Board members related to or involved with any bid/RFP/RFO/RFI or any other kind of solicitation, issued by this District during the pendency of the solicitation/bidding period from the time the solicitation is posted until the time that the matter is under consideration by the Board at a public meeting. All inquiries shall be in writing and must be directed through the purchasing department.

Lobbying is defined as any action taken by an individual, firm, association joint venture, partnership, syndicate, corporation, and all other groups who seek to influence the decision of a Board member or District personnel on the award of any contract.

Any bidder/proposer or any individuals that lobby on behalf of bidder/proposer will result in rejection and disqualification of said bid/proposal.

Exemptions from Bidding

The Board is not required to request bids for:

- A. purchases made from State of Florida Department of Management Services, Division of Purchasing through its contracts and negotiated agreement price schedules;
- B. Federal general services administration contracts;
- C. purchases made under provisions of F.A.C. 6A-1012(11) for supplies and services and F.A.C. 6A-1.012(14) for information technology resources or any item or product classification specifically excepted by statute or regulation;
- D. purchases made from bids awarded by city or county governmental agencies, other district school boards, community colleges, Federal agencies, public or governmental agencies of any state, State university systems, or other cooperative agreements, when the proposer awarded a contract by another entity defined herein, will permit purchases by the Board at the same or better terms, conditions, and prices as those awarded in the original bid or cooperative agreement;
- E. utilities and other required governmental fees;
- F. purchases made in emergencies for reasons such as health, safety, or loss of financial advantage;

Such purchases shall be confirmed by subsequent Board action.

- G. sole source purchases when no other item of comparable quality can be utilized.

Board Authorization for Purchases

The purchase of any item or service costing \$50,000 or more shall be specifically approved by the Board. Exceptions that do not require Board approval are:

- A. direct material purchases for which the projects' Guaranteed Maximum Price (GMP) has been previously approved by the Board, or direct material purchase that reduces the District's obligation for the sole purpose of sales tax savings;
- B. utilities and other required governmental fees;
- C. contracts that have been previously approved by the Board that include automatic renewal options.

Bid Protest

- A. A bidder who wishes to file a bid protest, must file such notice and follow procedures prescribed by F.S. 120.57(3), for resolution. For bids solicited by the purchasing department or the facilities department, the notice must be filed with the purchasing department.
- B. Any person who files an action protesting a decision or intended decision pertaining to a bid pursuant to F.S. 120.57(3)(b), shall post at the time of filing the formal written protest, a bond payable to the Board in an amount equal to \$25,000 or two percent (2%) of the lowest accepted bid, whichever is greater, for projects valued over \$500,000 and five percent (5%) of the lowest accepted bid for all other projects. The bond shall be conditioned upon the payment of all costs which may be adjudged against the protester in the administrative hearing in which the action is brought and in any subsequent appellate court proceeding. If, after completion of the administrative hearing process and any appellate court proceedings, the District prevails, it

shall recover all costs and charges, which shall be included in the final order or judgment, including charges made by the Division of Administrative Hearings, but excluding attorney's fees. If the protester prevails, s/he shall recover from the District all costs and charges which shall be included in the final order of judgment, excluding attorney's fees.

- C. Failure to file a notice of intent to protest, or failure to file a formal written protest within the time prescribed in section F.S. 120.57(3), shall constitute a waiver of proceedings under F.S. Chapter 120.

The Superintendent shall develop a *Purchasing Manual* that describes the processes necessary to implement the intent of this policy.

F.S. 1001.43, 1010.04
F.A.C. 6A-1.012

Revised 10/15/09
Revised 1/10/12
Revised 3/11/14

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E-Rate Technology Plan Addendum

Funding Year 2014-2015

Please enter appropriate and concise responses necessary to fulfill the plan addendum guidelines as prescribed below (i.e., use only the amount of space needed for the services and/or items listed). NOTE: If referenced, the current technology plan should be cited by page and paragraph. The material provided must address each E-Rate plan criteria area discussed below. Complete and accurate responses will be needed to meet the intent of the E-Rate Plan Addendum.

<u>Internal Connections and Basic Maintenance</u>	<u>Goals & Strategies</u>	<u>Monitoring & Evaluation</u>	<u>Professional Development</u>
<p>All Priority 2 services listed on a Form 470 (to include services or items identified in conjunction with the state master contract) must be included in technology plan.</p> <p><i>List each item or service that will be on your Form 470 that was not on the prior year's Form 470. List each new item or service only once but clearly delineate who is receiving the items or services.</i></p> <hr style="width: 20%; margin-left: 0;"/> <p>Section 10 of the Technology plan, details information as to the district's needs for telecom, internet and internal connections. This section also shows the district's percentage discount.</p>	<p><i>Clear goals and a realistic strategy for using the requested telecommunications and information technology to improve education services.</i></p> <hr style="width: 20%; margin-left: 0;"/> <p>Section 3 – Needs Assessment/Goals, show detailed items describing our department's goals for the 2014-2015 school year.</p>	<p><i>An evaluation process that enables the school or library to monitor progress toward the identified goals and make mid-course (i.e. mid-year), corrections in response to new developments and opportunities as they arise. If the process described in your current technology plan is very general, that description may not be sufficient to meet the expectations of the E-Rate program.</i></p> <hr style="width: 20%; margin-left: 0;"/> <p>Under Section 3.1 of our Technology Plan, we have a Project Management Strategy that details guidelines as to how a project should be managed.</p>	<p><i>A professional development strategy to ensure that staff knows how to use these new technologies to improve education services.</i></p> <hr style="width: 20%; margin-left: 0;"/> <p>Section 8 – The District's professional development gives a thorough overview of the strategies to ensuring staff's use of technologies.</p>