

David E. Gayler, Ph.D  
Superintendent



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## Charlotte County Public Schools Technology Plan

### School Years 2007-2010

Prepared by:  
Christopher J. Bress  
Director, Department of Learning  
Through Technology

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## Charlotte County district Technology Council

*Chris Bress, Director of Learning Through Technology*

*John Weant, Director of Information and Communications Services*

*Charlie Morris, District Technology Trainer*

*Mary DeBoer, District Technology Trainer*

*Jill Lee, Teacher – Myakka Elementary School*

*Debbie Jones, Teacher – Kingsway Elementary School*

*Deb Carney, Principal – Deep Creek Elementary School*

*Gary Helinski, Media Specialist – Murdock Middle School*

*Robert Bedford, Teacher – Lemon Bay High School*

*Karen Smith, Teacher – Charlotte High School*

*Carolyn Gorton, Assistant Director – Charlotte Technical Center*

*Doug Whitaker, Assistant Superintendent-Human Resources*

*Chuck Bradley, Director of Professional Development Academy*

*Greg Griner, Chief Financial Officer*

*Karen Owens, Program Staffing Specialist-Exceptional Student Education*

*Becky Ecklund, System Support Specialist-Exceptional Student Education*

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# 1. District Mission and Vision

The Charlotte County Public School district is committed to preparing students for success in a technology-enriched society by integrating effective technology into all areas of curriculum and providing students with the tools necessary for life-long learning and success in their personal and work-place goals.

The following Mission statement was adopted by the Charlotte County School Board on May 18, 2004.

**DISTRICT VISION: Student Success!**

**DISTRICT MISSION: We will provide an innovative educational environment that allows and inspires success for everyone.**

### **Charlotte County Public School Values:**

- Communication with clarity and civility
- Diversity and individual differences
- Effective Leadership
- Employees
- Ethical behavior
- Innovation and productivity
- Safe and healthy environments
- Strong connections among the home, school, and community
- Strong partnerships

### **TECHNOLOGY MISSION STATEMENT:**

*Charlotte County Public Schools will provide students with the technology, on-line resources, and bandwidth necessary to acquire the knowledge, develop the attitudes, and master the skills needed to meet the Sunshine State Standards. An equitable, cost-effective, sequential technology plan will empower students, teachers, and staff to integrate technology and telecommunications into all areas of the curriculum and the operation of Charlotte County Public Schools.*

## **2. General Introduction and Background Information**

The Charlotte County District Technology Plan vision statement, goals, and objectives speak to the task of preparing all students of today for the future. To accomplish this task, broad areas of technology-driven curriculum are being integrated into the classroom to improve student achievement. They include improving the capabilities of teachers, administrators, and support personnel through professional development, applying technology to solve problems throughout the school district, and designing an equitable instructional program that will facilitate and permit each student to reach his/her intellectual potential and individual success.

Charlotte County teachers realize that in order to prepare their students to succeed in the "Information Age" they must use new approaches and tools in their classrooms. Students must actively seek knowledge, not just passively receive it. Students must learn to become more responsible for managing their own learning as they live in an age that will require productive citizens to engage in life-long learning.

Technological tools are essential in the learning experiences of students who will live all their working lives in today's technology-driven environment. These tools include computers, the Internet, video, remote databases, electronic mail, distance learning, and more technologies currently under development. To support these goals, every staff member must be dedicated to providing technology rich curriculum to all students.

### **Technology for Students**

Charlotte County will promote the effective use of technology in the classroom as a tool to enhance student achievement through: research, creativity, productivity, communication, and entertainment. Charlotte County believes that by providing standards-based high-quality on-line resources for the students and their families, a sense of ownership and community will enhance the critical reading and research skills necessary for a successful future.

### **Technology for Staff**

Charlotte County believes it is essential that all staff develop the same technology-enriched work-place tools that students are encouraged to use. Staff members who are involved in the learning process will increase productivity, communication, and daily management skills. Charlotte County is committed to providing effective tools and learning experiences to all staff members. A wide range of professional development efforts are provided for all staff.

## 2.1 District Profile

Charlotte County Public Schools (CCPS) serves an increasingly diverse population of more than 17,500 PK-12 students: 78.1% white, 8.5% African-American, 7.4% Hispanic, 1.7% Asian, 0.3% American Indians 4.0% other minorities. Minority students now comprise 21.9% of the total CCPS population.

Twenty percent of the population is served by exceptional programs, including gifted. Also, 38.4% of CCPS students are eligible for free or reduced priced meals. Although the student population has more than doubled over the last 20 years, the drop in student population over the last two years was due in large part to the devastation from Hurricane Charley in August 2004. The demographic forecast predicts continued growth and the planning for this growth requires constant review to meet these changes.

Students are housed in ten elementary schools, four middle schools, three high schools, one alternative center, one center for the mentally and physically challenged, and the vocational technical center. In June 2003, the district successfully implemented a wireless wide-area network (WAN). In 2006 the district upgraded to a 100 mb Full-Duplex backbone and a 20 mb Full-Duplex connection between sites. This has provided a much-needed increase in the bandwidth available to the extensive on-line curriculum now being provided to all classrooms. The growing need and desire for content-rich online curriculum and research resources will require additional bandwidth. This will provide for a seamless integration of curriculum and technology as detailed by this plan. The use of on-line resources is monitored and saturation levels are the driving force for implementing additional bandwidth.

Through the implementation of a mathematically-determined equitable distribution of computers over the past several years, 100% of Charlotte County Public Schools have reached the baseline standard of an average of 1 computer per every 5 students. This method of equitable distribution for technology initiatives has eliminated much of the confusion of deciding which initiatives and installations will be done during the year. Any computers that are salvageable are placed in areas that have been identified as small labs or working areas. There are a variety of Apple computers placed in specialty rooms providing desktop publishing and video editing at some high schools.

CCPS believes that by providing a secure and controlled on-line environment with tools such as ELibrary, Grolier, Nettekker, and Compass Learning; students and staff can concentrate on research and curriculum goals that enhance each learning experience. Teachers can be assured of equitable access to primary resources of world and news events that are accessed in an educationally-sound environment.

Approximately 2,185 full-time and 215 part-time employees provide instructional and support services for students in the district. In addition, more than 1,500 volunteers contributed more than 53,000 hours to the district to help CCPS staff ensure success for all students. The total operating budget for the district exceeds \$145 million dollars.

The geographical location of Charlotte County has presented a problem in securing low cost telecommunications services. Because of the remoteness of the area, the cost of Internet service is significantly higher than would be realized at other more accessible school districts.

## **2.2 Technology Plan Development Process**

Charlotte County Public Schools is committed to the belief that a comprehensive educational technology plan is necessary to provide the district with the ability to address significant and challenging changes in today's technology-driven curriculum. Because technology changes so rapidly and new capabilities are available all the time, Charlotte County understands that it is critical to have effective planning tools and strategies in place to monitor the plan in all areas. We will perform mid-course corrections as necessary.

In the original 5-year plan from 1993, the committee was charged with the task of developing a plan that would be:

- Sequential
- Educationally sound
- Integrated with curriculum
- Inclusive of all areas using technology
- Designed to provide training to all staff
- Designed to provide an evaluation process
- Designed to show an implementation timetable and cost analysis

That plan successfully served the district from 1994-1999 when the Superintendent directed his Technology Council to write a new plan to carry the district into the next century. The plan update in 2001 was designed to build on the successes of Charlotte County's first technology plan and to steer the district toward a more technologically-integrated future through the school year of 2005. In 2004, because of technology that was implemented that didn't exist in 2001, the district updated the Technology Plan for 2004-2006. Since technology changes so rapidly and new capabilities are available all the time, the DOE Office of Educational Technology now recommends that each district update their technology plan each year. This allows districts to address federal program participation requirements as well as establishing appropriate guidelines, standards, and policies in relation to the acquisition and infusion of new and emerging technologies. To that end, Charlotte County Public Schools is expanding their current technology plan to cover the following:

- Development of resources necessary to build and maintain a base of technology, that is up to the current standards
- Effectively integrating technology into instructional activities
- Development of policies and procedures to provide equitable and safe access to all students
- Management of acquired technology
- Future needs assessment
- Review of appropriate educational software and developing strategies for replacement of equipment to provide equitable access
- Inclusion of new strategies for providing appropriate technology for students with disabilities
- Identification of critical instructional program needs to provide a foundation for future developments
- Management of complex technology infrastructure and telecommunications upgrades to address Internet-based curriculum, distance learning, and wireless access
- Extensive professional development plans to provide the staff with the technology tools needed to provide technology-enhanced instruction for all students
- Review and update school policies and student Internet usage forms to comply with federal guidelines

### **3. Technology Goals and Assessment**

#### **3.1 Assessment Tools**

##### **3.1.1 Information Based Technology Processes**

The District currently uses the Florida Department of Education Florida Innovates survey (formerly STaR) for determining district instructional and administrative telecommunications and technology needs. The Learning Through Technology Department also uses surveys to determine training and technology improvements. The department also meets once per month with the school based tech facilitators to share information about software and hardware changes, and receive input from the tech facilitators about the technology requirements needed to fulfill the district mission.

#### **3.2 Needs Assessment**

##### **3.2.1 Technology Baseline Standards**

Appendix A is a set of standards developed by Charlotte County that document the Technology Baseline Standards for the elementary, middle and secondary schools. The intent of the district is to maintain standards that all schools can monitor to assure success for their students. The Department of Learning Through Technology will continue to implement these standards.

##### **3.2.2 Current Status of Technology in District**

It is the goal of Charlotte County Public Schools to maintain an equitable method of distribution of technology resources. As of June 2006, 100% of the schools have achieved the standard average of 1 computer for every 5 students and broadband access in every classroom. The teachers, administrative, and support staff have standardized access to the hardware and software tools necessary for completing the district's mission and goals. A mathematical calculation has been developed to replace obsolete and unusable equipment. Each year a minimum of 20% of the existing equipment will be replaced, working toward increasing this percentage to 25%. Any useable equipment out of that replacement cycle will be re-allocated to other uses such as word processing labs or classroom needs.

##### **3.2.3 Implementation of Plan**

The timeline for implementation of the Technology Plan calls for 20% of all computer hardware to be replaced as district funding is provided. Funding is based on the difference between the school's current status and twenty percent of the baseline suggested in this plan. The schools will propose where to place the newer technology and how to integrate

it into their School Improvement Plan. This includes coordinating with the Department of Learning Through Technology to provide appropriate training for the teachers using the new technology. The Department of Learning Through Technology will write upgrades for this plan.

### **3.2.4 Infrastructure and Telecommunications**

As of June 2006, the district-wide wireless network consists of the following infrastructure and telecommunications equipment:

Wireless Wan:	25 switches, 58 radios, and 17 Towers
Electronics:	157 Switches, 4 Routers
Servers:	59 Novell, 31 Windows and 20 Caching
Communications:	2 VPN Concentrators, 2 PIX Firewall, 2 Packeteers, 20 Internet content filters/bandwidth shapers, 1 email filter, 1 spam filter, 2 bandwidth balancing units

### **3.2.5 Technology Support Personnel**

As the district technology program continues to grow, additional support personnel will be needed. It was recommended in 2001-2002 that a technology paraprofessional be hired at all secondary level schools. As of June 2006, only the high school has implemented this plan. The responsibility of the paraprofessional will be to assist in integrating technology into the school curriculum and to assist in implementing the district technology training program. They will also assist in training other personnel to be on-site experts to increase support for the entire staff. The paraprofessional will assist in evaluating technology at the school and monitoring all aspects of the Technology Plan.

**Network Technicians** (district position, responsible to the Director of Learning Through Technology). The five district network technicians are split into five regions and each supports 5 locations. They are also:

- Responsible for maintaining the local and wide area networks
- Responsible for installing software on local servers
- Responsible for installing networking software on individual computers
- Responsible for assisting with installation of software on individual computers

**Network Analyst** (district position, responsible to the Director of Learning Through Technology). The five district Network Analyst are split into five core areas of responsibility and assist each other in support of the district. They are also:

- Responsible for maintaining the local and wide area networks, switches, filters, and T1 lines
- Responsible for installing Novell software on local servers and workstations
- Responsible for installing networking software on individual computers

- Responsible for assisting with installation of software on individual computers
- Responsible for maintaining and monitoring email content filters, and packet shaping devices

**Trainers** (district position, responsible to the Director of Learning Through Technology). The two district technology trainers are split by grade levels: PK-5 (11 schools) and 6-12 (8 schools). They also assist each other in support of PK-12 teachers for both instructional and administrative software. The district technology trainers will supervise all district technology training for the staff. The Trainers will also be responsible for creating a training group of on-site experts who can assist users and provide guidance for evaluating student and staff success.

### 3.3 District Technology Goals

In the technology plan of 1993, the needs of Charlotte County Public Schools were assessed through a combination of individual interviews, focus groups, written surveys, strategic planning sessions, and site visits. At that time four major issues were identified and listed below as goals. To support these goals, a major upgrade to the telecommunications infrastructure was undertaken. As of this writing, the entire district has been connected by a wireless WAN providing the much-needed high speed Internet connectivity for instructional digital content. As the number of on-line instructional resources increases, additional bandwidth will be needed to support our efforts in each of the following goals. These goals continue to be the standard and framework that Charlotte County uses to ensure that all students meet the Sunshine State Standards.

**Goal 1: Increase student technical knowledge and academic performance through the use of technology. (See Appendix A for technology standards)**

- |              |  |
|--------------|--|
| Objective 1  | Provide modern computers, learning devices, and technology-based instructional tools and materials to every student. |
| Objective 2: | Integrate technology into the curriculum to enhance student learning.  |
| Objective 3  | Implement technological alternatives for student assessment.   |
| Objective 4  | Implement district technology standards.   |

**Goal 2: Increase technological knowledge throughout the district.**

- |             |  |
|-------------|--|
| Objective 1 | Increase the number of support personnel who have technology responsibilities at the school level by writing technical guidelines for inclusion in the job descriptions of |
|-------------|--|

curriculum specialists, county technicians, and future technology specialists.

Objective 2: Provide opportunities for growth and development through the use of onsite Technology Teachers, technological programs, advanced training, and the integration of technology with curriculum.

**Goal 3: Increase productivity and efficiency through the use of technology.**

Objective 1 Implement management software, both administrative and instructional.

Objective 2 Provide upgrades in hardware within budget guidelines to address district needs.

Objective 3 Increase bandwidth to meet the instructional needs of all schools.

Objective 4 Submit an annual budget outlining technology needs.

**Goal 4: Systematically evaluate the goals, objectives, and strategies contained in the district Technology Plan**

Objective 1 Design assessment tools to review the present technical resources and evaluate the future technology needs in the district.

Objective 2 Evaluate integration of technology with respect to increasing student performance with surveys and checklists.

Objective 3 Design technology assessments, which are formative and on-going.

Objective 4 Establish procedures for insuring technological considerations in all future construction and renovation plans.

**3.3.1 Short Term Goals (Listed in Priority Order)**

- Two additional technology trainers to implement increased training programs for all staff.
- Two additional support staff needed because of increased demands from additional hardware and software requiring support at the school level.

- Provide technology based instructional assets to support the Middle School Reform Act.
- Continue to develop and supply technology based solutions for both on-line and classroom curriculum.
- Upgrade the District caching servers to provide faster internet access for all classrooms.

### **3.3.2 Long Term Goals (Listed in Priority Order)**

- Continue procurement of computers to achieve the technology baseline standards
- Continue to implement innovative curriculum in all areas including ESE, disabled, and ESOL populations
- Continue to seek additional bandwidth to support the growth of on-line instructional resources
- Continue upgrades to the electric and network infrastructure to handle the growth in population

## **4. Funding Plan**

### **4.1 Budget**

The major sources of funding for the district-wide technology plan are all recurring sources. They are state technology incentive dollars and district technology plan dollars.

The following is a break down of the anticipated 2006-2007 school year budget and where the money will be allocated. These dollars will be needed to meet the obligations and expenditures of the Department of Learning Through Technology. It is assumed that the dollar amount of the budget will grow 5% each year for the next five years. A breakdown by section will be provided with each years update to the plan.

**CAPITAL OUTLAY REQUEST**

**2006-2007**

Project Number: 700's

Project Name: Technology

Priority Number	Location Number	Location Abbrev.	Description	Specify: New Replacement Remodeling	Estimated Cost
N/A		125	State Inservice	State \$\$\$	\$120,000.00
N/A		126	State Equipment \$	State \$\$\$	\$425,697.00
6		701	Instructional Hardware	New	\$200,000.00
8		703	Support Hardware	New	\$150,000.00
9		704	Support Replacement	Replacement	\$150,000.00
7		705	Computer Network	Replacement	\$150,000.00
5		708	District Software	New	\$200,000.00
11		709	ICS Software	New	\$5,000.00
10		710	ICS Replacement	Replacement	\$20,000.00
4		713	Instructional Software	New	\$200,000.00
19		714	Vocational Programs	New	\$40,000.00
15		716	ESE technology	New	\$90,000.00
16		719	ESOL/Families First Technology	New	\$40,000.00
2		720	Middle Schools	Replacement	\$280,000.00
1		722	High School Replacement	Replacement	\$350,000.00
3		723	Elementary Replacement	Replacement	\$488,000.00
12		725	Administrative/Staff Software	New	\$30,000.00
18		726	Read 180 hardware materials	New	\$10,000
17		729	Wireless Infrastructure	New	\$150,000
20		730	District ICS software project	New	\$65,000
21		731	District ICS hardware project	New	\$110,000

Total estimated cost of request (last page only) \$3,273,697

## **4.2 Distribution of Funds**

Budget requests each year are based on the equitable distribution method discussed previously. Each year 20% of the current resources are upgraded or replaced as necessary. Support services are funded by Capital Outlay money. Telecommunications services are paid out of district Operational funding. Federal E-Rate discounts for supported services are requested each year. Additional funds are distributed to the schools under the following guidelines: \$3 per student for software and \$2 per student for peripherals.

## **5. Technology Acquisition**

The Department of Learning Through Technology will maintain a set of standard specifications for hardware, software, network wiring, and management. These specifications will be available upon request to any department or school making purchases.

### **Construction and Renovation Projects**

All construction and renovation projects will consider emerging technologies and design in coordination with this technology plan. It is much less expensive to plan for and install building-wide wiring before construction than to retrofit an existing building. For equity, it is essential that all construction and renovation projects integrate the standards set out in this technology plan.

### **Central Office Mainframe and Networking System Backbone**

The backbone of the computer system is the district-wide area network. Network design and implementation is the responsibility of the Department of Learning Through Technology. The network must be designed to connect school and administrative offices to the WAN. Central office and site-based personnel, including administrators, teachers, classified personnel and students, must be able to access the system at appropriate levels. The system must be user friendly. The Department of Learning Through Technology will ensure successful implementation of the local and wide area network at all sites.

### **Wide Area Network**

Implementation of wide area networks for the Charlotte County Public Schools district Technology Plan will meet or exceed the standards as described in Appendix A.

## **Maintenance/Repair**

To continue to minimize cost and to maximize quality of service to individual schools, Charlotte County Public Schools provides a centralized repair service for hardware. Repair service will be provided without cost to individual school sites. If it is exceedingly costly or impossible to secure replacement parts, the district will declare the equipment obsolete or no longer cost effective to repair. If a piece of equipment will cost more than fifty percent of the cost of replacing it, the district will not repair the equipment. If necessary the district will provide schools with information on the replacement policies of various software companies. Unless the district holds the license on the software, it will be the responsibility of the school site to follow through on the replacement of damaged software.

To assist in the maintenance and good stewardship of school technology, training will be provided in preventive and minor maintenance so that school-site staff will be able to keep technology in good working order. When it becomes clear that the increasing amount of instructional technology requires additional support staff, they will be provided for in the district budget.

The vocational technical school will explore the possibility of offering courses in network management and in electronic equipment repair and, if feasible, will provide a practicum for some students in repairing the district's equipment, under the supervision of district repair staff.

## **Maintenance Support and Training**

1. Maintain the centralized repair department at Special Projects Center and hire additional technicians as needed to maintain all audio, video, and computer equipment. A repair person should be hired at a ratio of one for every 1000 new pieces of electronic equipment purchased.
2. Maintain a full time department of Learning Through Technology. This department is available to work with teachers, to train personnel, to consult on the scheduling of school based training, to coordinate software, hardware, and support materials, and to assist in the writing of School Improvement Plans.
3. Maintain current network technicians and hire additional network technicians at a ratio of one for every 500 computers.
4. Hire additional staff to provide technology training as needed.

## **Upgrade/Replacement**

When it is determined by the Department of Learning Through Technology that it is more cost-effective to upgrade a particular piece of hardware than to replace it, district funding will be available on an equitable basis. One example is adding memory to a computer so that it can use current software instead of buying a new computer.

When upgrades are available for licensed software, district staff will determine whether funding will support a district-wide upgrade. At times, an upgrade will not be considered significantly better than the current version, and the upgrade will not be provided. Schools can spend their own funds on upgrades, as appropriate to their School Improvement Plans.

The Superintendent, or his designee, has the right at any time to update/upgrade minimum standards when ordering computer hardware. The School Board will be notified in writing any time he exercises this option.

## **6. Access**

### **Copyright, Fair Use, Ethical Behavior**

The staff and students of Charlotte County will abide by U.S. copyright law regarding software and other instructional materials under the “fair use” rule. The district will provide a statement on software copyright to each school site and district office. Each principal will be responsible for informing all staff members of the serious nature of illegally copying software. In addition, each school principal will be responsible for ensuring that only legal copies of software are in use.

### **Security**

The district has established an Internet safety policy which addresses Federal Children Internet Protection Act (CIPA) requirements with the following: a) access by minors to inappropriate matter on the Internet; b) The safety and security of minors when using electronic mail, chat rooms and other forms of direct electronic communications; c) unauthorized access such as hacking and other unlawful activities by minors online; d) unauthorized disclosure, use, and dissemination of personal information regarding minors; and e) measures designed to restrict minors’ access to materials harmful to minors. This Technology Plan, the guidelines developed in Appendix A, B and C, and the associated public hearing as related to School Board action demonstrate the districts’ compliance to CIPA requirements.

To ensure security of desktop/network technology on student/teacher computers, the district has purchased BlueCoat servers which provides security for Internet access to block and/or filter child pornography, obscene or offensive content, and any other web site not deemed educationally sound.

The district also uses SurfControl to monitor and classify incoming web and email traffic for later analysis by the Department of Learning Through Technology.

In addition, On Guard (computer management software) has been adopted as standard for the Apple computers in our special use computer labs. The district implements Novell

Netware Policies for the Windows computers using: Zenworks, Patch Management, User Policy Implementation, and Reporting Applications. Such software is also designed to protect software licenses and to meet or exceed CIPA requirements.

## **7. User Support Plan**

All instructional staff and appropriate administrative/support staff shall be trained in the educational use of technology. It shall be the responsibility of the local school technology committee to work with the Director of Learning Through Technology, to determine when and who will be trained. The project will focus on establishing a group of trained professionals who will be responsible for training other school personnel and also serve as models for how technology is to be integrated into the curriculum. The Technology Trainer project is an extension of and supports the district's Professional Development Department.

The Department of Learning Through Technology will maintain a staff to provide technical support to all schools, training services by the district trainers, and other needed network personnel as needed.

## **8. Professional Development Plan**

### **8.1 Overview**

#### **Rationale**

People are the most valuable resource when planning for technology. Professional development is at the heart of creating effective education for the students of the Charlotte County Public Schools. If schools are to be communities of learners, it is essential that the system doesn't invest only in students, but in the people who are their role models: teachers, administrators, and support personnel. Any contribution to the success of teachers and administrators is a direct contribution to the success of the students with whom they work. The experiences, education, and successful practices that already exist within the Charlotte County Public Schools staff provide the foundation on which to improve teaching, learning, and student achievement through the uses of technology. Even though the Florida Public School Technology Funds, the largest funding source for our technology focused professional development, is no longer categorical the district has continued to apportion this critical funding for our continued training requirements.

## Goals

The goal of professional development in Charlotte County Public Schools is to provide a clear, systematic, innovative and comprehensive training program for the instructional and administrative uses of technology. Participants in the training program include teachers, administrators, support personnel and related others. In-service will provide a mechanism for change effecting administrative needs, classroom practices of teachers, attitudes and beliefs of school-based staff, and the learning outcomes of students. Through training, a new school culture will emerge, which will be the catalyst for significant and lasting change in Charlotte County Public Schools.

1. Improve instructional, academic, and technological skills of all district staff.
2. Support the development and integration of educational technology into curricular, instructional, and assessment programs.
3. Support the development and implementation of educational technology into administrative programs.

All district instructional and administrative personnel will demonstrate appropriate skill levels in:

- Student Administration Software
- Electronic mail.
- Operation of equipment such as printers, copiers, FAX machines, TV monitors, DVD Players, CD-ROM, document cameras, audio enhancement systems and LCD projection devices.
- Basic care and preventive maintenance of electronic equipment commonly used.
- Basic use of WAN
- Basic use of closed circuit TV system.

All district non-instructional clerical staff will demonstrate appropriate skill levels in:

- Microsoft Office Suite.
- Electronic mail.
- Operation of equipment such as printers, copiers, FAX machines, and other hardware and software as dictated by their job descriptions.

All other non-instructional staff will demonstrate appropriate skill levels in areas dictated by their job descriptions or district directives.

Professional Development Department will:

- Provide a calendar with options for training.
- Determine effective/knowledgeable trainers in the district.
- Provide mentor teachers.
- Bring in outside qualified resources to target needed training.

- Provide an equipped training site.
- Provide release time where appropriate.
- Provide levels of training for exploratory, introductory, and advanced sequenced training.
- Establish relationships with vendors, businesses, and universities for additional training offerings.
- Include self-evaluation as part of the training mechanism.

As training evolves beyond the basic skills, staff will be given the opportunity to be trained in technology best practices. Curriculum specialists from all areas will be employed to bring "what works" to Charlotte County. At this level, skills using these practices will be taught to teams of new trainers.

## **8.2 Technology Training Process**

### **Overview**

All instructional staff and appropriate administrative/support staff shall be trained in the educational use of technology. It shall be the responsibility of the local school technology committee to work with the Director of Learning Through Technology, to determine when and who will be trained. The Department of Learning Through Technology will focus on establishing a group of trained professionals who will be responsible for training other school personnel and also serve as models for how technology is to be integrated into the curriculum.

To implement the Technology Training project, the Department of Learning Through Technology shall accept a list of potential trainers from each school principal. Those who are selected to participate will receive extensive training on the most advanced uses of instructional technology. These people will be trained to use and teach many different software packages. Training will take place at the Professional Development Center, learning centers in schools, training programs out-of-district, and conferences around the state.

## 9. Program Evaluation

### Monitoring the Technology Plan

If the technology described in this plan is to be effective in helping students become prepared for the future, on-going evaluation must take place. The evaluation must include:

**Formative evaluation:** designed to provide feedback for continuous improvement. It will consist of these annual evaluations:

- Surveys for a random sampling of district employees to determine level of use and current needs.
- Focus group interviews hosted by the Department of Professional Development to determine student attitudes and use of technology as it relates to school success.
- Curriculum Specialist logs to determine level of support activity at each school.

**Summative evaluation** designed to determine if all the goals and objectives of the past three years have been achieved. It will determine not only the level of usage, but the sophistication of that usage over time. It will consist of these evaluations:

- Compilation and analysis of annual survey results over the three year period.
- Compilation and analysis of results from annual focus group interviews.
- Benchmarked assessment at fifth and eighth grades to determine technology expertise based on the technology standards outlined in the District Technology Plan. (Appendix A)
- Survey/checklists to assess the use of technology to improve communication within schools, within district, with parents, and outside the district.
- Analysis of student performance data to determine the impact of technology use with selected groups, as well as the level of teacher integration of technology in the classroom.

## Evaluation

Schools using technology need to evaluate the adequacy of the technology component of their School Improvement Plan. They should examine the manner in which it is implemented, the way the plan is used and the significance to the district PASS Plan. This self evaluation process should be performed each year. Amendments to individual plans should reflect the results of the evaluation.

The following evaluation form will be used for this purpose.

### A. Student Learning

1. Cite specific examples on how technology has been used to assist, support, and facilitate the delivery of instruction to accomplish student learning. Examples should include the following educational indicators showing a shift from:
  - passive to active learning
  - whole class to small and individualized instruction
  - assessment based on test performance to assessment based on products, progress, and effort
  - single style delivery system to multi-learning style
  - concrete thinking to abstract, logical, higher order thinking
  - teacher directed learning to student directed learning
2. Describe how technology has been used to teach students keyboarding, writing, accessing information, analyzing data, sending and receiving information.
3. Describe any special or unique way technology has been used to increase student learning at your school.

### B. Teacher/Administrative Uses

1. Describe how teachers/administrators have used technology to restructure teaching and learning. Include the following indicators:
  - becoming classroom managers and facilitators
  - using a variety of presentation tools
  - using telecommunications
  - collecting data
  - creating a more efficient and effective administrative environment
  - preparing reports and presentations
  - communicating with colleagues, parents, and students
2. Describe unique uses of technology for increased productivity.

## **10. E-Rate Program Planning Criteria**

In order to participate in the Federal E-Rate program, all schools must provide planning information associated with the following criteria. A separate addendum will be created each year that will document the specific items requested through the E-Rate program along with documentation that clearly aligns each request with a section of the District Technology Plan.

The five criteria for E-Rate planning are:

1. Clear goals and a realistic strategy for using telecommunications services to improve student education. CCPS has clearly documented the widening list of on-line curriculum and the population growth that would indicate a need for added telecommunications for each year of the District Technology Plan.
2. A professional development strategy to ensure that staff know how to use these new technologies. CCPS has developed and is implementing a thorough plan in making certain that all staff are trained to support the district's goals.
3. An assessment of telecommunications services, hardware, software and other services that area needed. CCPS and specifically, the Department of Learning Through Technology, document current services and establish the level of service that is needed to achieve student success.
4. A sufficient budget to acquire and support the non-discounted elements of the plan. CCPS has documented each portion of the budget and has identified sources for all expenditures of this Technology Plan.
5. An evaluation process that enables the district to monitor the goals of the District Technology Plan. CCPS has developed planning and evaluation tools to ascertain compliance with all aspects of the Technology Plan.

## **11. NCLB: Enhancing Education Through Technology Plan**

To comply with the Federal NCBL Legislation, all schools must include procedures with the following three reporting requirements:

Notice of School Improvement Status and Options: School districts must notify parents when their child's school has been identified for school improvement, for correction action, or for restructuring.

The school district must also include an explanation of the parents' option to transfer their child to another public school, with transportation provided when requested, or to obtain supplemental education services. Sec. 1116(b)(6)

The school district will collect appropriate data and include such in the annual report . The number and percentage of schools identified for school improvement and how long the schools have been so identified will be included

in the annual report. Parents of students attending a school in a district identified for improvement are entitled to know why the school district was identified for improvement. The state is responsible for providing an explanation to parents in an easily understood format.

School districts participating in the NCLB:EETT Grant Program are required to submit detailed project application material which includes program-specific planning information. Submission and approval of the EETT Part I Entitlement Application is sufficient to address this part of the plan. CCPS has submitted a completed EETT Part I Application. This application is on file and can be reviewed by contacting the Director of Learning Through Technology.

# Appendix A

## Student Technology Standards:

### Elementary School Baseline Standards

1. One networked computer lab containing 32 workstations with a printer ratio of one to five computers, or a laser printer, and one large scale, digital touch board.
2. An electronic circulation and card catalog system with a minimum of five computer workstations equipped with CD-ROM, electronic encyclopedia, and databases. One networked laser printer will be provided. Media stations will be added at a ratio of one for each additional 200 students above the baseline standard of 600.
3. One networked workstation for every administrator, secretary, data entry clerk, guidance counselor, and bookkeeper with appropriate software, capable of on-line activities with central office system. Network laser printers for administrative use will be placed at a ratio of one per six users in an office. Data entry clerk will be issued an appropriate printer in accordance with job description.
4. Ratio of 1:5 (computers to students) networked workstations with printing capabilities for every five computers. The teacher computer will be included in the 1:5 ratio.
5. A projection device available to classroom teachers at the ratio of 1:8 classrooms with a minimum of 3 school wide.
6. A communication link to the wide area network shall be available in each classroom, including portables.
7. Appropriate furniture and security for all equipment.
8. Bandwidth to elementary classrooms increased as needed.
9. All support personnel will have access to a networked workstation as appropriate.
10. All Exceptional Student Education classrooms will be equipped at the established baseline standard. The district ESE Department will supply any adaptive devices needed to meet a student's Individual Educational Plan (IEP). Assurances must be made at the school level to see that both ESE and regular education classrooms have the proper ratio of equipment.
11. English for Speakers of Other Languages (ESOL) classrooms will be equipped at the established baseline standard.
12. One digital scanner per grade level.
13. Two mobile, large-scale, digital touch boards.
14. To meet the communication goals of the Student Learning Plans and assist in the implementation of this Technology Plan, the Department of Learning Through Technology requests that the Department of Facilities provide

intercom and telephone access to all classrooms during the term of this Technology Plan.

15. Department of Learning Through Technology recognizes that schools have individual needs. Therefore, each school will be allocated a minimum of \$3 for software and \$2 for peripherals based on annual unweighted FTE. Each school's Technology Committee will recommend these purchases and submit them to Department of Learning Through Technology for approval following an annual schedule.
16. Programs that need additional technology funding may submit a line-item request to the Department of Learning Through Technology for the next fiscal year.

### **Middle School Baseline Standards**

1. Baseline equipment will be used to establish three networked instruction labs with 24-30 workstations (or an equivalent amount of grouped classroom work areas) with a ratio of one printer to every five computers or a laser printer. The Student Learning Plan determines location and instructional use.
2. Journalism/Yearbook work area with at least five computers, a laser printer, and a scanner.
3. An electronic circulation and card catalog system with a minimum of eight computer workstations equipped with CD-ROM, electronic encyclopedia, and databases. One networked laser printer will be provided. Media stations will be added at a ratio of one for each additional 200 students above the baseline standard of 1000.
4. One networked workstation for every administrator, secretary, data entry clerk, guidance counselor, and bookkeeper with appropriate software, capable of on-line activities with central office system. Network laser printers for administrative use will be placed at a ratio of one per six users in an office. The data entry clerk will be issued an appropriate printer in accordance with job description.
5. Ratio of 1:5 (computers to students) networked workstations with printing capabilities for every five computers. The teacher computer will be included in the 1:5 ratio.
6. A multi-media projection device available for each computer lab, two for check out through the Media Center, with a minimum of 5 school wide.
7. A video distribution system shall be available in every classroom.
8. A communication link to the wide area network shall be available in each classroom, including portables.
9. Appropriate furniture and security for all equipment.
10. Other clerical and support personnel will have access to a networked workstation.
11. All Exceptional Student Education classrooms will be equipped at the established baseline standard. The district ESE Department will supply any adaptive devices needed to meet a student's Individual Educational Plan (IEP). Assurances must be made at the school level to see that both ESE and regular education classrooms have the proper ratio of equipment.

12. English for Speakers of Other Languages (ESOL) classrooms will be equipped at the established baseline standard.
13. One digital scanner per grade level.
14. Two mobile, large-scale, digital touch boards.
15. Vocational classes will be supported with appropriate technology for their needs as funded by state and federal monies, and line item requests.
16. To meet the communication goals of the Student Learning Plans and assist in the implementation of this Technology Plan, the Department of Learning Through Technology requests that the Department of Facilities provide intercom and telephone access to all classrooms during the term of this five-year Technology Plan.
17. The Department of Learning Through Technology recognizes that schools have individual needs. Therefore, each school will be allocated a minimum of \$3 for software and \$2 for peripherals based on annual unweighted FTE. Each school's Technology Committee will recommend these purchases and submit them to the Department of Learning Through Technology for approval following an annual schedule.
18. Programs that need additional technology funding may submit a line-item budget request to the Department of Learning Through Technology for the next fiscal year.

### **High School Baseline Standards**

1. Baseline equipment will be used to establish three networked instruction labs with 24-30 workstations (or an equivalent amount of grouped classroom work areas) with a ratio of one printer to every five computers or a laser printer. The Student Learning Plan determines location and instructional use.
2. Three networked business labs with 24-30 workstations with a ratio of one printer for every five computers, or a laser printer.
3. Journalism/Yearbook work area with at least five computers, a laser printer, and a scanner.
4. An electronic circulation and card catalog system with a minimum of ten computer workstations equipped with CD-ROM, electronic encyclopedia, and databases. One networked laser printer will be provided. Media stations will be added at a ratio of one for each additional 200 students above the baseline standard of 1800.
5. One networked workstation for every administrator, secretary, data entry clerk, guidance counselor, and bookkeeper with appropriate software, capable of on-line activities with central office system. Network laser printers for administrative use will be placed at a ratio of one per six users in an office. The data entry clerk will be issued an appropriate printer in accordance with job description.
6. Ratio of 1:5 (computers to students) networked workstations with printing capabilities for every five computers. The teacher computer will be included in the 1:5 ratio.
7. A multi-media projection device available for each computer lab, two for check out through the Media Center, with a minimum of 7 school wide.

8. A video distribution system shall be available in every classroom.
9. A communication link to the wide area network shall be available in each classroom, including portables.
10. Appropriate furniture and security for all equipment.
11. A ratio of one digital scanner per department.
12. Other clerical and support personnel will have access to a networked workstation.
13. Vocational classes will be supported with appropriate technology for their needs as funded by state and federal monies, and line item requests.
14. All Exceptional Student Education classrooms will be equipped at the established baseline standard. The district ESE Department will supply any adaptive devices needed to meet a student's Individual Educational Plan (IEP). Assurances must be made at the school level to see that both ESE and regular education classrooms have the proper ratio of equipment.
15. English for Speakers of Other Languages (ESOL) classrooms will be equipped at the established baseline standard.
16. Three mobile, large-scale, digital touch boards.
17. To meet the communication goals of the Student Learning Plans and assist in the implementation of this Technology Plan, the Department of Learning Through Technology requests that the Departments of Facilities provide intercom and telephone access to all classrooms during the term of this five-year Technology Plan.
18. The Department of Learning Through Technology recognizes that schools have individual needs. Therefore, each school will be allocated a minimum of \$3 for software and \$2 for peripherals based on annual unweighted FTE. Each school's Technology Committee will recommend these purchases and submit them to Department of Learning Through Technology for approval following an annual schedule.
19. Programs that need additional technology funding may submit a line-item budget request to the Department of Learning Through Technology for the next fiscal year.

It is the goal of CCPS to provide all schools with access to grade-appropriate, up-to-date technologies in sufficient quantities to accommodate student and staff needs for instruction and assessment.

Each school will be required to have a technology committee that meets on a regular basis to assure:

- Consistency and interoperability with existing and future technology delivery systems
- Upward migration to emerging technology standards
- Manageability
- Continual support and maintenance
- Flexibility
- Consistency between procurements and anticipated resources

## Appendix B

### Acceptable Use of Technology Resources

The Charlotte County School Board provides technology resources to its students and staff for educational and administrative purposes. The goal in providing these resources is to promote educational excellence in Charlotte County schools by facilitating resource sharing, innovation, and communication with the support and supervision of parents, teachers, and support staff. The use of these technology resources is a privilege, not a right.

The School Board firmly believes that the value of information, interaction, and research capabilities available outweighs the possibility that users may obtain material that is not consistent with the educational goals of the district.

Proper behavior, as it relates to the use of computers, is no different than proper behavior in all other aspects of Charlotte County School District activities. ALL users are expected to use computers and computer networks in a responsible, ethical, legal, and polite manner. Users must acknowledge the understanding of this rule as a condition of receiving Internet access by signing the Internet Usage Agreement.

The School Board policies 7540, 7540.1, 7540.2, 7540.3 and 7540.4 support and help protect all students as outlined under the Federal Children's Internet Protection Act. In relation to this Act, Charlotte County Public Schools will diligently work to do the following:

- a. Limit access by minors to inappropriate materials on the Internet and World Wide Web;
- b. Maintain the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications;
- c. Limit unauthorized access, including so-called "hacking" and other unlawful activities by minors online;
- d. Limit unauthorized disclosure, use, and dissemination of personal information regarding minors, and;
- e. Limit materials that may be harmful to minors.

District computers, networks, and Internet connections shall be used only for purposes related to the schools or the performance of an employee's job. No personal use of any kind is permitted.

#### 1. General Rules

- A. All web pages created by students and student organizations on the district's computer system will be subject to treatment as district-sponsored publications. Accordingly, the district reserves the right to exercise control over such publications.
- B. E-mail is not a confidential medium. It can be reviewed by others and should be used only for legitimate educational purposes.

- C. E-mail will be monitored and there is no guarantee of privacy when using any school technology.
- D. School and district bulletin boards will be set up as closed forums for the sole purpose of information dissemination to district employees.
- E. Users will not transmit confidential information concerning students or others over systems not designated for that use, and will use care to protect against negligent disclosure of such information.
- F. Damage caused by intentional misuse of equipment will be charged to the user.
- G. Users are responsible for safeguarding their own passwords, and will be held accountable for the consequences of intentional or negligent disclosure of this information.
- H. Network accounts are to be used only by the proper authorized owner of the account.
- I. Any use of the network for commercial, personal, or private business is prohibited.
- J. Any use of the network for product advertisement, political lobbying, or non-secular promotion is prohibited.
- K. Users must be aware of the finite capacity of the network and must cooperate with the network administrator.
- L. Users shall not intentionally seek information on, obtain copies of, or modify files, other data, or passwords belonging to other users or misrepresent other users on the network.
- M. All communications and information accessible via the network should be assumed to be public record.
- N. Use of the network shall not disrupt other users on the network; hardware or software shall not be destroyed, modified, or abused in any way.
- O. Malicious use of the network to write programs that harass other users or infiltrate a computer or computing system and/or damage the software components of a computer or computing system is prohibited.
- P. Hate mail, harassment, discriminatory remarks, profanity, obscenity, or language which may be offensive to another are prohibited on the network.
- Q. The illegal installation of copyrighted software for use on any district computer is prohibited. Installation of district software on home computers is prohibited unless approved by district administration.
- R. Any violations of the use of the Internet shall be reported to the assigned teacher or technology facilitator and the assigned principal/administrator.
- S. Users are responsible for keeping copyrighted software of any kind from entering the local area network via the Internet.
- T. The user shall maintain the integrity of the District Network. The user is responsible to report all violations. The user is also responsible for making sure all e-mail/web pages sent or received by him/her does not contain pornographic material, computer viruses, or files that are potentially dangerous.
- U. Users shall log in/out correctly from all network connections.
- V. Users shall observe time limits while on-line as mandated at their local site.
- W. All student Internet connections must be monitored by a teacher, technology facilitator, or administrator.

X. Use of e-mail by instructional staff shall be limited to before and after school, planning period(s), and lunch.

2. Classroom Accounts

Sponsors of classroom accounts are responsible for teaching proper techniques and standards for participation, for guiding student access to appropriate sections of the network/Internet, and for assuring students that if they misuse the network/Internet, they may lose their privileges.

3. Damages

Charlotte County Public Schools will not be responsible for any damages suffered through the loss of data. The district is not responsible for the accuracy or quality of information obtained through the Internet.

4. Discipline

Disciplinary Action for Violation of Rules

Violations of this rule are only representative. Other forms of misconduct arising from, or connected with, the use of the Internet or local area networks may result in disciplinary action. The School Student Handbook will cover the disciplinary action associated with

# Appendix C

## **Student Internet Usage Agreement: The Charlotte County Public Schools Acceptable Use of Technology Resources/Internet Usage Agreement**

The Terms and Conditions for Internet use and this Agreement were written referencing School Board Polices 7540, 7540.1, 7540.2, and 7540.3; Student Network and Internet Acceptable Use and Safety

### **STUDENT RESPONSIBILITY AGREEMENT**

I, \_\_\_\_\_, student at \_\_\_\_\_ School, am making a request for school network/Internet access privileges. I have read this agreement, and I understand and agree to abide by the duties and responsibilities that go with my access to the network. I further understand that access to this network is a privilege and not a right, and that this privilege may be revoked at any time if I make inappropriate use of the network or fail to comply with the terms of the Charlotte County Public Schools Internet Usage Agreement. I may also be subject to school discipline for failure to comply.

Student's signature \_\_\_\_\_ Date \_\_\_\_\_

### **PARENT OR GUARDIAN NETWORK ACCESS PERMISSION**

As a parent or legal guardian of \_\_\_\_\_, the above named student, I have read this agreement, and I understand and agree that my child must abide by the duties and responsibilities that go with his/her access to the network/Internet. I further understand that access to this network is a privilege and not a right, and that this privilege may be revoked at any time if he/she makes inappropriate use of the network or fails to comply with the terms of the Charlotte County Public Schools Internet Usage Agreement. My child may also be subject to school discipline for failure to comply. Furthermore, I understand that this network access is designed and intended for educational purposes; however, I recognize that it is impossible for Charlotte County Public Schools to restrict access to all controversial materials. I therefore agree not to hold the district responsible for any materials acquired on this network.

Parent/legal guardian's signature \_\_\_\_\_ Date \_\_\_\_\_

### **TEACHER VERIFICATION**

My signature verifies that the above named student has been instructed in all of the duties and responsibilities necessary for proper network/Internet access and the student has demonstrated to me an understanding of those responsibilities.

Teacher's signature \_\_\_\_\_ Date \_\_\_\_\_

# Appendix D

## Student Technology Education Standards

The following are PreK-12 standards that Charlotte County has adopted for its students from the International Society for Technology in Education in collaboration with the Milken Exchange on Education Technology:

### 1. Basic Operations and Concepts

Students demonstrate a sound understanding of the nature and operation of technology systems.

Students are proficient in the use of technology.

### 2. Social, Ethical, and Human Issues

Students understand the ethical, cultural, and societal issues related to technology.

Students practice responsible use of technology systems, information, and software.

Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

### 3. Technology Productivity Tools

Students use technology tools to enhance learning, increase productivity, and promote creativity.

Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.

### 4. Technology Communications Tools

Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.

Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

### 5. Technology Research Tools

Students use technology to locate, evaluate, and collect information from a variety of sources.

Students use technology tools to process data and report results.

Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

## **6. Technology Problem-solving and Decision-making Tools**

Students use technology resources for solving problems and making informed decisions.

Students employ technology in the development of strategies for solving problems in the real world.

### **K-2 Standards:**

Numbers in parentheses following each performance indicator refer to the standards category to which the performance is linked.

### **Prior to completion of Grade 2 students will:**

1. Use input devices (e.g., mouse, keyboard, remote control) and output devices (e.g., monitor, printer) to successfully operate computers, VCRs, audio tapes, and other technologies. (1)
2. Use a variety of media and technology resources for directed and independent learning activities. (1, 3)
3. Communicate about technology using developmentally appropriate and accurate terminology. (1)
4. Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, and elementary multimedia encyclopedias) to support learning. (1)
5. Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (2)
6. Demonstrate positive social and ethical behaviors when using technology. (2)
7. Practice responsible use of technology systems and software. (2)
8. Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (3)
9. Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories. (3, 4, 5, 6)
10. Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners. (4)

**Prior to completion of Grade 5 students will:**

1. Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. (1)
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (1, 2)
3. Discuss basic issues related to responsible use of technology and information, and describe personal consequences of inappropriate use. (2)
4. Use general-purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. (3)
5. Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (3, 4)
6. Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. (4)
7. Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. (4, 5)
8. Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem-solving, self-directed learning, and extended learning activities. (5, 6)
9. Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (5, 6)
10. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. (6)

**Prior to completion of Grade 8 students will:**

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (1)
2. Demonstrate knowledge of current changes in information technologies and the affect those changes have on the workplace and society. (2)
3. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (2)
4. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (3, 5)
5. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (3, 6)
6. Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (4, 5, 6)
7. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (4, 5)
8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (5, 6)
9. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. (1, 6)
10. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (2, 5, 6)

**Prior to completion of Grade 12 students will:**

1. Identify capabilities and limitations of contemporary and emerging technology resources, and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. (2)
2. Make informed choices among technology systems, resources, and services. (1, 2)
3. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole. (2)
4. Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information. (2)
5. Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence). (3, 4)
6. Evaluate technology-based options, including distance and distributed education, for lifelong learning. (5)
7. Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity. (4, 5, 6)
8. Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning. (4, 5)
9. Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. (3, 5, 6)
10. Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works. (4, 5, 6)

# APPENDIX E

## Technology Training Process Rationale

The basic in-service approach is to influence teacher behavior, which, in turn, causes change in student attitudes and behaviors. The goal of technology training is to change the way classroom instruction takes place so that student performance will increase with the use of technology.

There are five stages of evolution for technology in the classroom which are recognized: entry, adoption, adaptation, appropriation, and invention.

To handle the evolution of learning technology and to offer the greatest opportunity for all employees to be literate in its use, the following training outline has been developed.

### Skill Levels

#### 1. Awareness Level

This level will introduce staff to the district Technology Plan, the technology currently in place, and an overview about future technology. In addition, staff will receive basic instruction in the operation of computers and an introduction to word processing.

#### 2. Introductory Skill Level

This level will inform, motivate, and provide a general overview of software applications and network capabilities. This level will provide instruction to meet minimum skill levels.

- Teacher workstation introduction and local technology plan overview.
- More on word-processing.
- Introduction to classroom management software.
- Introduction to the usage of spreadsheets and databases.
- Introduction to the concept of networking.
- Introduction to electronic mail (E-mail).

#### 3. Intermediate Skill Level

This level provides specific instruction applicable to employees' jobs and is intended to enable staff to enhance their skills.

- Intermediate word processing.
- Creating and using spreadsheets and databases.
- Classroom instruction tools and presentation technology.
- Implementation of integrating technology into curriculum.

- Advanced classroom management tool implementation.

#### 4. Advanced Skill Level

This level provides for higher technology instruction and is intended to enable the employee to develop skills with advanced software applications.

- Advanced productivity tools.
- Classroom interaction instructional tools in multimedia.
- Desktop publishing tools.
- Advanced presentation technology.
- FIRN and Internet searching.

#### 5. Specialized Training Level

This level is offered to meet needs in specific areas.

- Advanced curriculum integration for Learning Through Technology Training project trainers.
- Advanced on-line searching in Internet application.
- Model technology classroom application.

These trainers will then be utilized on an “as needed” basis, and will not be financially rewarded except when performing training beyond the normal workday. Compensation for training will be at the trainer’s hourly rate.

Trainers will be expected to keep up-to-date in all aspects of technology throughout their tenure as trainers. Trainers will model the use of technology and be a ready resource for viewing how technology can be used in the classroom. Trainers will establish training schedules in conjunction with their school technology committee and in conformity with the Technology Plan. Trainers will follow established criteria for requesting the performance of in-service activities. No in-service will be performed without written authorization from the office of the Director of Department of Learning Through Technology.

The procedures for requesting authorization for training are as follows:

1. A list of participating teachers, a description of what type of training, the date, time, and location of the training are to be submitted to the Director of Department of Learning Through Technology for approval two weeks prior to the training.
2. An authorization memo, a payroll sign-in sheet for the participants who will be paid, and the in-service forms to be completed will be sent to the school hosting the training.

3. The authorization memo, payroll form, and inservice forms will be returned to the Director of Department of Learning Through Technology for processing. They will then be forwarded to the payroll and staff development departments.

### **Evaluation of the Technology Trainer Program**

The **Technology Trainer** project will be evaluated in an on-going process by the Department of Learning Through Technology. The program will be evaluated based on its ability to meet the training goals set forth, recommendations from the Instructional Department, and recommendations from the Charlotte County School Board.

### **Funding for Staff Development**

Funding shall include, but not be limited to, out-of-county travel, substitutes, and after hours training at a rate of \$15/hour.

Sources for funding technology training shall come from the Charlotte County district technology budget, state categorical funds, and grants. Equipment purchased for trainers to use for training shall count as part of the school's baseline allocation. This equipment is **not the property of the trainer**. Schools having received baseline must provide trainers with equipment from the school's existing or future allocations. No additional equipment will be purchased at these sites.

## APPENDIX F Student Population Breakdown

School Name	Code	Pop	CAUCASIAN	Percent	BLACK	Percent	HISPANIC	Percent	Multi Racial	Percent	ASIAN	Percent	AMERICAN INDIAN	Percent
Sallie Jones Elementary	021	793	600	75.7%	67	8.4%	66	8.3%	41	5.2%	17	2.1%	2	0.3%
Charlotte High Adult Community Education	031 032	2010 780	1662 422	82.7% 54.1%	148 147	7.4% 18.8%	100	5.0%	46	2.3%	49	2.4%	5	0.2%
Peace River Elementary	041	530	384	72.5%	57	10.8%	52	9.8%	29	5.5%	8	1.5%		0.0%
Charlotte Harbor Center	042	170	122	71.8%	26	15.3%	12	7.1%	8	4.7%	2	1.2%		0.0%
Lemon Bay High	051	1542	1449	94.0%	12	0.8%	40	2.6%	25	1.6%	14	0.9%	2	0.1%
Baker Elementary Center	062	131	61	46.6%	34	26.0%	18	13.7%	16	12.2%	2	1.5%		0.0%
East Elementary Neil Armstrong Elementary	081 111	566 616	484 345	85.5% 56.0%	17 85	3.0% 13.8%	30 120	5.3% 19.5%	24 44	4.2% 7.1%	6 20	1.1% 3.2%	5 2	0.9% 0.3%
Punta Gorda Middle	121	1047	878	83.9%	85	8.1%	44	4.2%	26	2.5%	12	1.1%	2	0.2%
Port Charlotte Middle	131	1026	687	67.0%	149	14.5%	139	13.5%	33	3.2%	16	1.6%	2	0.2%
Meadow Park Elementary	141	806	573	71.1%	62	7.7%	100	12.4%	45	5.6%	23	2.9%	3	0.4%
Port Charlotte High	151	2159	1565	72.5%	302	14.0%	176	8.2%	67	3.1%	45	2.1%	3	0.1%
The Academy	161	344	257	74.7%	41	11.9%	24	7.0%	17	4.9%	3	0.9%	2	0.6%
Charlotte Tech Center	162	186	134	72.0%	28	15.1%	11	5.9%	1	0.5%	9	4.8%	2	1.1%
CVN-Night School	163	228	192	84.2%	24	10.5%	6	2.6%	3	1.3%	1	0.4%	2	0.9%
L.A. Ainger Middle	181	1027	959	93.4%	5	0.5%	30	2.9%	25	2.4%	8	0.8%		0.0%
Vineland Elementary	191	899	833	92.7%	3	0.3%	29	3.2%	18	2.0%	13	1.4%	2	0.2%
Liberty Elementary	201	768	518	67.4%	89	11.6%	80	10.4%	60	7.8%	14	1.8%	7	0.9%
Murdock Middle	211	905	671	74.1%	90	9.9%	82	9.1%	44	4.9%	14	1.5%	4	0.4%
Myakka River Elementary	231	736	626	85.1%	24	3.3%	43	5.8%	33	4.5%	7	1.0%	3	0.4%
Deep Creek Elementary	251	850	634	74.6%	78	9.2%	67	7.9%	58	6.8%	12	1.4%	1	0.1%
Crossroads	281	24	9	37.5%	8	33.3%	6	25.0%	1	4.2%		0.0%		0.0%
Kingsway Elementary	301	914	626	68.5%	147	16.1%	59	6.5%	67	7.3%	14	1.5%	1	0.1%
McKay Scholarship	518	80	68	85.0%	7	8.8%	1	1.3%	3	3.8%		0.0%	1	1.3%
Home School	998	310	105	33.9%	3	1.0%	5	1.6%	5	1.6%	3	1.0%	2	0.6%