

Monroe County  
Department of Education

Technology Plan

**Madisonville Tennessee  
2011-2013**

**Office of Technology  
Gary Sharp, Director**

### **III. SYSTEM-WIDE GOALS AND OBJECTIVES** ***Instructional Technology***

#### **A. GOAL I: Goals and Strategies**

Objective 1.1: Technology will be used to improve teaching, student learning, and analyze data. Students and teachers will be better prepared to internalize technological skills. The plan for integrating technology into schools is aligned with *Tennessee Technology Standards*, the school and or district's vision for technology education. In addition, these goals and objectives are a significant part of the district *Strategic Plan*. Goals having objectives of this plan are designed to improve the academic performance of all students. This district plan includes any additions or revisions as required by the Tennessee State Department of Education. The Office of Technology resources provide an electronic capability that meets local, state, and federal requirements. The Office of Technology will assure processes that allow sharing of information with all constituency groups through a contract with ENA (Education Networks of America).

#### **Strategies:**

- 1.1.1. Familiarize staff with *Tennessee Technology Standards* that are the foundation for the implementation of technology into the curriculum. These standards are available online and accessible to every teacher at [www.connect-tn.org](http://www.connect-tn.org).
- 1.1.2. Explore education technologies and utilization of technologies that enhance existing curricula and promote targeted advanced thinking skills.
- 1.1.3. Provide a technology-rich learning environment that is viable within schools.

- 1.1.4. Assure that all classrooms have adequate access to computers and Internet capability to enhance a technology curriculum that emphasizes higher order thinking skills, complex problem solving, and cognitive research.
- 1.1.5. Assess student scores by employing software that encourages improved student performance. Benchmarks and *Technology Standards* identify success provide benchmarks for appropriate levels of proficiency.
- 1.1.6. Utilize *Thinklink* software three times during the school year to benchmark student performance in reading, math, and science content in order to provide interventions relative to result of these test administrations.
- 1.1.7. Use student performance on benchmark tests to promote active learning and individualize instruction.
- 1.1.8. Enhance coursework through active student use of technological resources, such as Internet and multimedia experiences when appropriate.

**Objective 1.2: Educators, parents, students, and community members support the schools' initiatives in the uses of technology.**

***Strategies:***

- 1.2.1. Each school is encouraged to implement technology programs designed to complement each school's improvement plan.
- 1.2.2. Work collaboratively among teaching staff to design technology-supported projects. This collaboration is reflected at an appropriate time as an element of the model for Teacher Evaluation.
- 1.2.3. Utilize software accompanied by training and implemented system-wide, such as *A+*, *Aimswab*, *ThinkLink*, and *Discovery Education*
- 1.2.4. Reflect authentic uses of technology in lesson plans.

- 1.2.5. Include strategies for implementing *Tennessee Technology Standards* into appropriate elements of the Teacher Evaluation model.
- 1.2.6. Connect technologies programs to the curriculum of feeder schools through software such as *ThinkLink*.

**Objective 1.3: TCAP testing results are the benchmark for evaluation of the effectiveness of technology integrated into the curriculum. Although this is difficult to measure, we believe the integration of technology is significant in schools that show improvement in student academic performance and migration toward proficiency in major content areas.**

- 1.3.1. Analyze Adequate Yearly Progress in major content areas and among targeted populations to serve as one indicator for evaluation of technological success. The district Technology Director determines what most appropriately describes technological proficiency since there are no well-defined measures of success in this area, other than *TESS (Technology in Education System Survey)*.

**Objective 1.4: Title II, Ed Tech funds and E-rate discounts are used to improve the academic achievement and technological literacy of all students, and to improve the capacity of all teachers to integrate technology effectively into curriculum and instruction and analyze data.**

***Strategies:***

- 1.4.1. Apply Title II, Ed Tech funds to provide performance measurement systems at each elementary school and provide opportunity for district coaches/teacher leaders to attend technology conference.
- 1.4.2. Technology Director, elementary and high school supervisors collaborate to acquire curriculum software, such as Aimsweb, A+, and *Thinklink*.

- 1.4.3. Apply E-rate funding to establish a firewall that greatly diminishes infiltration of patterns related to virus activity. This firewall protects all schools and Central Office computers by shutting down infected computers that interfere with processes throughout the district's network.
- 1.4.4. Establish a Tech User Group training program which would afford teachers with an opportunity to experiment with new technology, create and share technology resources, and foster a technology professional learning community within schools

**Objective 1.5: The school district takes a proactive approach to ensure that all students and teachers have increased access to technology. The district plans to provide technology and maintenance for computers in high school special education through collaboration of Office of Technology and Office of Special Education.**

*Strategies*

- 1.5.1. Prioritize system-wide technology needs with strong consideration for technology funding given to schools of the district that are identified for improvement or corrective action under section 1116 of Title I.
- 1.5.2. Place high-needs schools as priority in the allocation of Title II, Ed Tech funds or other funding sources. These schools are Title I schools that also receive grant funds for equipment in addition to local and Title I funds. These schools are identified through the *STaR (School Technology and Readiness) Chart* reports located at <http://crep.memphis.edu/TESS>, in addition to progress relative to *TESS (Technology in Education System Survey)* results as they compare to State performance goals.
- 1.5.3. Schedule workshop sessions beginning SY 09 (continuing) relative to training on Activ Inspire Promethean software which promotes the use of innovative strategies for the delivery of specialized curricula through the use of technology.
- 1.5.4. Hire an instructional technology coach in 2010. It remains desirable to hire additional coaches as funding is available.

- 1.5.5. Purchase additional high-capacity computers, tablets, and interactive boards for K -12 Special Education classrooms through a partnership between Office of Technology and Office of Special Education.

**Objective 1.6: The district promotes and encourages the development and use of innovative strategies for the delivery of specialized curricula through the infusion of technology.**

*Strategies:*

- 1.6.1. Continue scheduled meetings of Career Technical Advisory Board that brings together business decision makers, elected officials, and education personnel who know the influence of this program.
- 1.6.2. Explore and identify research-based technology strategies and programs based on an annual Teacher Survey that reflects areas to be strengthened and that are related to goals, objectives, and strategies of the district *Strategic Plan* and *Tennessee Technology Standards*. These programs are implemented once exit outcomes are established and costs are defined.
- 1.6.3. Reflect innovative uses of technology through Teacher Evaluation components and lesson plans. Principals in this district require staff members to continuously associate technology skills within curricula.
- ] 1.6.4. Combine school efforts to encourage the in-house sharing of strategies and programs. This collaboration extends into Teacher Evaluation components.
- 1.6.5. Schedule ongoing system-wide staff development opportunities each year that allow professional staff to accelerate every level of technological skill.
- 1.6.6. Implement Assistive Technology when appropriately determined through the Office of Special Education.
- 1.6.7. Incorporate technological literacy skills across the curriculum.

- 1.6.8. Implement Distance Learning, expected to begin service during the 2010-11 school year. Seek funding for virtual field trips and seek additional equipment through the RUS Grant.
- 1.6.9. Provide wireless capability to be utilized in all schools as e-rate and local funding become available.
- 1.6.10. Continue to deploy fiber connectivity to all schools as infrastructure and funding become available.
- 1.6.11. Install Promethean Boards per request of schools. An increase of these systems is prevalent in Monroe County.

*CAREER TECHNICAL EDUCATION (VOCATIONAL) CURRICULUM:*

**Objective 1.7: Career Technical Education encourages a learning environment organized to facilitate maximum utilization of creative applications designed to prepare these students for the workplace. .**

***Strategies:***

- 1.7.1. Coordinate with Career Technical Education Plan that is available in the office of the Supervisor of Career Technical Education.
- 1.7.2. Research opportunities at local higher education facilities, such as, Cleveland State Community College and Athens Career Centers. This unique partnership extends technical programs into college level classes.
- 1.7.3. Implement software to accelerate career development. For example, *Kuder* assessment, an interest survey, is administered to students as requested through guidance.
- 1.7.4. Assist students with four year plans that are available at each high school for student consideration, prior to setting individual goals.
- 1.7.5. Increase *Dual Enrollment* and *Career Fast Track* opportunities that are available through a partnership with Cleveland State Community College.

- 1.7.6. Link students with appropriate business and industry personnel through collaboration with advisory groups.
- 1.7.7. Articulate high school Career Technical Education courses with Cleveland State Community College and Athens Career Center. Currently, students may take a college test and get college or technical credit for passing.
- 1.7.8. Ensure that highly-skilled educators with Industrial certification are employed to teach: Computer Applications and Keyboarding
- 1.7.9. Utilize video conferencing equipment to provide unique learning experiences for Career Technical Education.

**Objective 2.1: An annual district Teacher Survey identifies services, hardware, software, and other services necessary to improve education and/or library services. *TESS (Technology in Education System Survey)* and *STaR (School Technology and Readiness) Chart* surveys measure ongoing progress relative to these services).**

***Strategies:***

- 2.1.1. Review *TESS (Technology in Education System Survey)* and *STaR (School Technology and Readiness) Chart* reports that provide indicators of progress towards becoming a technologically-proficient district. It is the intent of this district to improve student performance as defined by *No Child Left Behind* guidelines and set forth by the school district *Strategic Plan*.
- 2.1.2. Identify schools as proven by Adequate Yearly Progress as high priority for extending technological opportunities, such as Distance Learning and computer lab development.
- 2.1.3. Explore strategic utilization and implementation of appropriate hardware, software, and other services through the Director of Technology and the TCSP leadership committee.



- 2.1.4. Prioritize requests from schools through observation of *TESS (Technology in Education System Survey)*, *STaR (School Technology and Readiness) Chart* survey results, and systemwide initiatives. These results are accessible online at <http://crep.memphis.edu/TESS>.
- 2.1.5. Research software and hardware options in order to implement the most effective programs within schools as determined by curriculum supervisors.
- 2.1.6. Compile an annual computer count by the Office of Technology. This computer count reflects that there is approximately one computer per three students of each school. The current goal is to improve computer interoperability and increase the number of computers so that two students have access to one high-capacity computer.
- 2.1.7. Increase Distance Learning opportunities. This initiative is developing through collaborative efforts of the department of Special Education as well as grant funding.
- 2.1.8. Expand wireless capability to be utilized in all schools during the 2011-12 school year.

**Objective 2.2: Monroe County Department of Education maintains resourceful media centers that foster state-of-the-market technological training. These centers elicit improved and competent computer skills.**

***Strategies:***

- 2.2.1. Facilitate technological growth through daily instructional practices of media center staffing.
- 2.2.2. Wire all Media Centers to accommodate Internet communication.

- 2.2.3. Utilize Media Center capabilities to stimulate effective technological literacy.
- 2.2.4. Foster improved technological strategies that provide strong linkage with school improvement goals through opportunities in each Media Center.

**Goal III: Promotion of Curricula and Teaching Strategies That Integrate Technology**

**Objective 3.1: The district identifies and promotes curricula and teaching strategies that effectively integrate technology into curriculum and instruction as designed through *Tennessee Technology Standards*.**

***Strategies:***

- 3.1.1. Explore and identify research-based technology strategies and programs based on an annual Teacher Survey that reflects areas to be strengthened and that are related to goals, objectives, and strategies of the district *Strategic Plan* and *Tennessee Technology Standards*. These programs are implemented through guidance of curriculum supervisors once historical exit outcomes are established and costs are defined.
- 3.1.2. Select technology tools of teaching and learning that are aligned with *Tennessee Technology Standards*. These standards are available online and accessible to every teacher at ([www.connect-tn.org](http://www.connect-tn.org)).
- 3.1.3. Determine student academic achievement needs from Baseline data relative to state-mandated tests. Data are also extracted from *STaR (School Technology and Readiness) Chart* and *TESS (Technology in Education System Survey)* reports, and are used in prioritizing additional technological integration.
- 3.1.4. Rely upon Instructional Technology Coaches and lead teachers to promote and strengthen technological advancement within school.

- 3.1.5. Integrate technological advancement as indicated by a timeline included in this *Technology Plan*.
- 3.1.6. Explore a Bring Your Own Technology Initiative and experiment with a “Tech Week” in each high school (Spring 2012).

#### **D. Goal IV: Professional Development**

**Objective 4.1: Computer literate persons have increased opportunity to use knowledge and information. An annual district Teacher Survey is completed by the staff of every school at the beginning of each school year through the Office of Technology Supervisor. The direction of professional development in the technology department is coordinated by the Technology Director and Instructional Supervisors. Staff development training encourages the transition of schools from Early Tech to Developing or Advanced levels. Scheduled activities help teachers become more comfortable and proficient with technology, and give teachers diverse ways to effectively integrate what they learn within classroom lesson plans.**

##### ***Strategies:***

- 4.1.1. Complete an annual district Teacher Survey that complements the district *Strategic Plan* as well as school improvement plans.
- 4.1.2. Utilize a technology-learning lab located at the Monroe County Central Office to extend technological literacy experiences among employees.
- 4.1.3. Provide sustained and ongoing training organized by in-house trainers, as needs and expertise are aligned, and that meets critical state guidelines regarding approved professional development.
- 4.1.4. Provide training for teachers and other staff members organized by Supervisor of Technology and Staff Development. These training sessions include deploying spyware, virus scan, and Windows updates. Additional sessions are scheduled to provide guidance for cleaning up computers, networking, and wiring.

- 4.1.5. Schedule ongoing training sessions relative to all levels of technological literacy, as determined through the Tennessee *STaR (School Technology and Readiness) Chart* and *TESS (Technology in Education System Survey)* reports as provided through the Office of Technology and Staff Development.
- 4.1.6. Utilize the school district website and teacher made websites that provides staff with tutorials as well as lesson and unit plans by course content at [www.monroe.k12.tn.us](http://www.monroe.k12.tn.us).
- 4.1.7. Communicate through system e-mail that allows constituents to submit valuable information, and that more promptly provides timely technology services to classrooms through the offices of Technology Director and Technicians.
- 4.1.8. Apply for formula grant funds that support technological advancements through Title II, E-rate, and other funding sources when appropriate.
- 4.1.9. Elicit information from system supervisors that provide guidance in the promotion of a healthy technological environment.
- 4.1.10. Collaborate with neighboring school districts that provide extended and diverse training opportunities.

**Objective 4.2: Monroe County Department of Education maintains a computer lab for teacher training. Computers within the lab are routinely upgraded.**

***Strategies:***

- 4.2.1. Schedule events for teachers / staff within Monroe County schools in the central Office and various school locations.

**Goal V: Technology Type and Costs**

**Objective 5.1: The district provides an adequate budget to acquire and support all elements of the *Technology Plan*, such as hardware, software, professional development, and other services needed for implementation. An annual district Teacher Survey will identify areas to strengthen. Beginning SY 06 Student Information Management System, *Star Student*, became operational at each school. This on-line service provides access to student data relative to attendance and student history as well. State-required reports continue to be transmitted through this service. In addition, school staff will continue training to construct report card information through *Star Student*. Title II A and Local funds will provide some professional development opportunities for teachers: Activ Inspire, Powerpoint, *Thinklink*, *Tablets*. Software purchases include Think Link, Aimsweb, *Credit Recovery*, *Accelerated Reading* update, *Discovery Education*, and *A+*. In-house trainers also provide in-service sessions for educators from novice skills to advanced skills. Hardware purchased to carry out technology initiatives (\$60,000.00).**

Technology-related Budgetary Items		
Hardware	Federal	\$210,000
Internet Services	State	\$20,000.00
E-rate (Internet <i>J</i> Telephone)	E-rate	\$300,000.00
Software	Local	\$70,000.00
Hardware	Local	\$70,000.00
Professional Development	Title IIA Title I	\$40,000.00
Office of Technology Personnel	Local	\$183,000.00
Services	Local	\$70,000.00
<b>TOTAL</b>		\$963,000.00

***Strategies:***

5.1.1. Report timely student data through the Director of Technology

- 5.1.2. Employ In-house trainers to stimulate knowledge of technology at all levels of learning.
- 5.1.3. Utilize Title II A and Title I federal funds to provide technological training (\$40,000.00).
- 5.1.4. Select hardware to support infrastructure that promotes teaching and learning initiatives.
- 5.1.5. Train administrators and teaching staff to utilize appropriate components of *Star Student*. Software support is available at no additional charge.
- 5.1.6. Enhance technological literacy skills through the Office of Career Technical Education.
- 5.1.7. Repair and maintain hardware in a timely manner relying upon priority issues.
- 5.1.8. Apply e-rate funding to directly support technology and accelerate student performance through Internet and Telecommunications Services (\$300,000.00).
- 5.1.9. Research and secure software that encourages student performance.
- 5.1.10. Staff personnel adequately to provide assistance from within the Office of Technology-Director, Network Engineer, technician, audio-visual specialist and Technology Trainer (\$183,000.00).

Objective 5.2: The system continues to develop strategies to meet funding challenges relative to technological advancement.

***Strategies:***

5.2.1. Research grant opportunities.

**Objective 5.3: Title II, Ed Tech, and Title IIA allocations are used to provide and sustain certain technology professional development sessions.**

**Goal VI: Evaluation and Accountability**

**Objective 6.1: The school district will monitor progress toward goals of technological advancement through the Director of technology with ongoing needs assessment, in addition to, *TESS (Technology in Education System Survey)*, and *STaR (School Technology and Readiness) Chart* reports. The system will respond to new developments and opportunities as they arise.**

**Objective 6.2: The school district monitors the progress of funded activities within the areas of effective integration of technology into classrooms, increasing the effectiveness of teachers, and enabling students to achieve challenging *Tennessee Technology Standards*.**

**Strategies:**

6.2.1. Establish goals following analysis of the *TESS (Technology in Education System Survey)* and *STaR (School Technology and Readiness) Chart* reports that are annually monitored for benchmarks of progress. It is the intent of the Monroe County School district to elevate high-needs schools in critical areas. These areas will be determined through a committee process with administrative oversight.

- 6.2.2. Evaluate Adequate Yearly Progress in academic areas as a significant part of the technology monitoring system. Educators determine the role effective technology plays within content areas.
- 6.2.3. Identify students of need through performance-based assessments as they relate to *Tennessee Technology Standards*. *Thinklink* and *AimswEB* evaluates student status three times during the school year.
- 6.2.4. Review of goals / objectives / strategies reflects necessary changes or revisions. These benchmarks occur within each grading period or when critical issues require maintenance.

## **Goal VII: Parental Involvement**

**Objective 7.1: Parents will be informed of timely progress points relative to technology through school newsletters, PTA sessions, Monroe County Board of Education meeting updates, *Annual Report*, survey instruments, timely updates on the system website, school websites, e-mail, press releases and School Reach calling system.**

*Strategies :*

## **H.Goal VIII: Collaboration With Adult Literacy Service Providers**

- 8.1.1. Promote options of *Monroe County Adult Education Program* to assist adults with the attainment of a GED. Students use software that elevates their opportunity for success with the OED exam.
- 8.1.2. Review student situations that allow an application to the OED program through designated high school personnel.
- 8.1.3. Schedule administration of OED exam in conjunction with Cleveland State Community College at the college site.



## **Goal IX: Children's Internet Protection Act (CIPA) Compliance**

### **I.**

**Objective 9.1: The system places the *Computer Use Consent* form and the Monroe County School Board Policy on the system website [www.monreo.k12.tn.us](http://www.monreo.k12.tn.us) .**

#### *Strategies*

- 9.1.1. Disseminate *Computer Use Consent* forms to the parent / guardian of each student. This form remains on file with the classroom teacher.
- 9.1.2. Share the responsibility of updating staff members about the *Computer Use Consent* form and the Board policy that addresses it through principal meetings.
- 9.1.3. Implement training for students, teachers, and administrators concerning appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms as well as cyber bullying awareness and response.

**Objective 9.2: System Internet capabilities are safeguarded through a state filtering system and firewalls.**

#### *Strategies*

- 9.2.1. Prohibit chat room activity.
- 9.2.2. Apply E-rate funding to provide a firewall that will greatly diminish infiltration of patterns related to virus activity. This firewall protects all schools and Central Office computers by shutting down infected computers that interfere with processes throughout the district's network.

## TECHNOLOGY TIMELINE

**Objective 10.1: The implementation plan for the technology team's goals must include an awareness of the school district's budget. Technology changes so quickly that it is impossible to know what advances will be available in five years.**

### *Strategies*

- 10.1.1. Review and revise *The Monroe County Department of Education TCSP Technology Plan* each year during the budget process to assure that the district is purchasing the most current and most appropriate equipment to align with system goals. This plan is submitted to, and approved on a cycle determined by the State Department of Education, then placed on the district website.
- 10.1.2. Complete TESS (Technology in Education System Survey) and *STaR (School Technology and Readiness) Chart* surveys annually as reported to the State.
- 10.1.3. Update E-rate reports annually and submit to the State appropriately.
- 10.1.4. Develop evaluation plans in schools and across the district to ensure that technology plans generate desired outcomes.
- 10.1.5. Explore federal, state, and other grant opportunities and funding sources for education technology.
- 10.1.6. Partner with schools to assist with purchases of high-capacity computers for labs and classrooms.

### **SY 11-12 TIMELINE:**

- Use *TESS (Technology in Education System Survey)* and *STaR (School Technology and Readiness) Chart* survey results to steer the direction of district technological advancement.
- Revisit the district *Technology Plan* and place on the district website.
- Continue training as needed with *Star Student*, student information management system, directed by the Director of Technology.

- Administer the *Parapro* exam online for Paraprofessionals in the Title I Schoolwide Program when selected as an option to become highly qualified. These tests are administered at the Central Office @ \$50.00.
  
- Encourage building technology committees to spend a portion of their budgets on technological advancements to purchase printers, scanners, and digital/video cameras. Title I allocations may be utilized for purchases related to technology for schoolwide programs in Title I schools.
  
- Coordinate opportunities for technological advancement through the district staff development program.
  
- Increase multi-media learning opportunities through equipment purchases and training.
  
- Employ a full-time Technology Instructional coach.
  
- Increase the number of high-capacity computers and tablets in learning labs and classrooms in transition toward a ratio of students to computer at 2: 1.
  
- Assist with hardware and software purchases to set up and / or upgrade computer labs at our schools.
  
- Purchase additional system-wide software for purchase includes:  
*Thinkl.ink; A+, AIMweb, Discovery Education*, and additional updates to current software.
  
- Update and clean up hard drives as prioritized.
  
- Evaluate process of updating all servers with memory and hard drives in all schools accommodated by Windows operating system.
  
- Utilize an on-line product (*Horizon*) to maintain sales and records in all cafeterias. Upgrade memory and hard drives on all computers utilized by School Nutrition.
  
- Explore Distance Learning opportunities for all schools.
  
- Continue process to provide fiber connectivity to all schools.

Explore opportunities in partnership with Education Networks of America that will improve bandwidth.

- Purchase additional high-capacity computers for K -12 Special Education classrooms through a partnership between Office of Technology and Office of Special Education.

**SY 12-13 TIMELINE:**

- Use *TESS (Technology in Education System Survey)* and *STaR (School Technology and Readiness) Chart* survey results to steer the direction of district technological advancement.
- Revisit the district *Technology Plan* and place on the district website.
- Continue training as needed with *Star Student*, student information management system, directed by the Director of Technology.
- Encourage building technology committees to spend a portion of their budgets on technological advancements to purchase wireless infrastructure, video conferencing equipment, and tablets. Title I allocations may be utilized for purchases related to technology for schoolwide programs in Title I schools

