

Technology Plan

July 1, 2012- June 30, 2015

Memphis Community Schools

School Code 74-120

St. Clair County RESA

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Memphis Community Schools

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<http://www.memphisk12.org/downloads/technplan.pdf>

The Technology Plan for Memphis Community Schools has been and continues to be developed by the District School Improvement Team, Teachers, Administrators, District Technology Coordinator, and consultants from the Intermediate School District. The District Plan is a three-year plan including 2012-2015 school years.

Our belief is that technology should not be a separate entity, but blended into our very existence in our learning community. Our plan for technology is a working document that allows for changes to take place as needs and opportunities arise for us to continue to provide the most up-to-date advances in technology to our school population.

The future will require that students be knowledgeable and proficient in the use of technology available in today's world. Through education of these technologies we will provide students with the ability to adapt to change, solve problems, make decisions, and think creatively. Education in the area of technology will provide students with knowledge to understand what technology can and cannot do in our complex society and serves as the interdisciplinary link with other curricular areas.

Demographics

The Memphis School District is approximately 60 square miles in area and lies in the southeastern portion of Michigan. It includes all of the City of Memphis and portions of the Townships of Columbus, Kenockee, Kimball, Riley, and Wales within St. Clair County and a portion of the Township of Richmond within Macomb County. The school District is 22 miles southwest of the City of Port Huron and 45 miles northeast of the city of Detroit. The current population within the School District's boundaries is estimated to be 5,000. The Memphis School District consists of High School with 320 students, a Junior High School with 265 students, and an Elementary School with 410 students enrolled. Adventures Daycare and Preschool programs are also held in the district. Memphis Community Schools is comprised of a 94% white, 3% African American and 2% Asian student population. 11.6% of Memphis families qualify under the Federal poverty level. 54% qualify for the free or reduced lunch program.

Mission Statement

The Memphis Community Schools will provide progressive and integrated technology that facilitates learning in an ever-changing world.

Vision

Our vision is that of, “Begin with the end in mind.” We want our learning community to understand and use technology as a natural function of their everyday experiences. We will develop an awareness of the roles of technology in society and have experiences in using technology in a variety of business, educational and social situations.

Goals have been set for the next 3 years to:

- Continue to provide up-to-date equipment to meet technology demands
- Educate teachers and students on the use of technology to enhance learning
- Utilize technology to increase student learning
- Integrate technology into daily lessons
- Increase parental involvement through the use of technology
- Use data to increase student learning
- Prepare students for 21st Century technology use

TECHNOLOGY GOALS

Timeline
2012-2013

Goal

1. Update District website
2. Complete installation of district wide wireless network
3. Provide ongoing professional development
Data Director, IPAD (tablet), Kindles, Online learning
4. Replace 80 desktop computers
5. Replace laptops in carts in all buildings
6. Purchase IPAD (tablet) carts
7. Increase number of computer stations for student use in classrooms
8. Increase on-line learning opportunities
Success Maker/Study Island
Grad Point
Connections Virtual Classroom
Blended Learning Environments
9. Review and revise curriculum based on Michigan Department of Education Educational Technology Standards and Expectations
10. Review and revise high school computer science course selections to develop and implement advanced computer classes
11. Review and revise instructional practices in all classrooms to meet increasing expectations for student knowledge for the use of technology.

12. Continued use of on-line grade book with teacher and parental access
13. Assist teachers in establishing an on-line presence
14. Replace sound systems/microphones in the elementary gym
16. Create interactive white boards using document camera (IPAD) and projector.
17. Implementation of revised
 - Acceptable Use and Internet Safety Policy (District)
 - Acceptable Use Agreement for Elementary Students
 - Acceptable Use Agreement for Secondary Students
 - Acceptable Use Agreement for employees, board members, volunteers and non-student adults
18. Continued implementation and use of Data Director (district data management system)
19. Continued use of Career Cruising to assist with development of EDP's
20. Update Security Systems (cameras and alarms) in all buildings
21. Participation in state pilot of on line testing for Social Studies

Timeline 2013-2014

1. Annual update of District website
2. Replace 40 computers
3. Provide ongoing professional development based on teacher survey results from previous year.
4. Provide computer access in each building from 7am - 9pm for use by students.
5. Implement revisions to technology curriculum based on testing data of student performance
6. Create a system to provide parents access to educational expectations for grade or course content through the District's web site
7. Continue use of on-line grade book with parental access.
8. Enhance instruction through the use of interactive white boards, audience response systems and blended learning.
9. Continue providing on line learning opportunities
10. Prepare for state on-line testing (2013-2014)
11. Replace Food Service data management system
12. Assist teachers in developing a two-way communication system through an online presence
13. Offer new High School courses: Web Design I and Video Productions

Timeline 2014-2015

1. Annual update of District website.
2. Replace 40 computers
3. Provide ongoing professional development in areas requested by teacher survey results from previous year.
4. Continue providing online learning opportunities
5. Implementation on online testing (MEAP)
6. Continue use of on-line grade book with parental access
7. Offer new high school courses: Web Design II and Basic Computer Programming

Curriculum Curriculum Integration

- *Goals and strategies, aligned with challenging State standards, for using telecommunications and technology to improve teaching and learning have been developed for use in Memphis Community Schools.*

Michigan Department of Education Educational Technology Standards and Expectations grade level mastery objectives will be used to review and revise the technology curriculum.

2012-2013

Implementation of revised curriculum (review completed 2011-2012)

Review of student test score data from 8th grade technology literacy testing and common assessments.

Review of curriculum instruction using integrated technology

Increase use of assisted technology to help at risk students

2013-2014

Evaluation of curriculum revisions

Review of student test score data from 8th grade technology literacy testing and common assessments.

Professional development: Instructional strategies to integrate technology into curriculum.

2014-2015

Review, revise instructional strategies to increase integrated technology into curricula and instruction.

Review and implement new technology for student use as it becomes available.

Student instruction will be given by a certified teacher at all levels. Students in grades K-8 will utilize either a computer lab setting for instruction or wireless laptop system within the classroom. High School computer classes will be advanced level offered as an elective course. Students will be evaluated based on Michigan Educational Technology Standards checklist.

Curriculum

Student Achievement

- *Strategies that are based in research and that integrate technology into curricula and instruction for purposes of improving student academic achievement and a timeline for this integration were developed.*

Activities that use technology have been developed and used at each grade level to integrate technology into the core academic subjects of math, science, social studies, and English Language Arts. At least one of the activities will be taught and required by all teachers each marking period in Junior/Senior High or trimester in the Elementary. In Math and Science students are taught to use technology to produce graphs and charts to display information. In Social Studies students are taught to do on-line research and produce a research based paper on topics within the curriculum. In English Language Arts students use the computer as a tool to produce writings, power point presentations, and research topics for written assignments.

Consultants from the St. Clair County RESA will be used to assist teachers in making lessons of study that promote the best practices in technology curriculum integration. Professional Development will be available for teachers to assist in implementing integrated activities within the classroom.

Data Director implemented in 2008 will continue to be used to warehouse data from assessment of student achievement at each level. A county wide program is being implemented by each district in the county. The St. Clair County RESA provides the professional development and assistance to promote the use of the program to ensure that data is being used to drive educational needs of the students and instruction in the classroom.

Timeline: 2012-2013

Continue technology integration in content area courses.

Use Data Director to store student achievement data, create tests and provide on line testing, create student growth reports

Use of Grad Point for credit recovery.

Use of Success Maker and Study Island for academic extension or remediation

Use of Connections Learning to provide Virtual Learning opportunities.

Develop student portfolio through Data Director

Increase Eighth grade Technology Literacy to 70%.

Implement use of IPADs(tablets), continued use of Kindles (e-text device), interactive whiteboards.

Increase use of assisted technology for at risk students

High school classes: Digital Art and Advanced Computers

Timeline: 2013-2014

Analyze achievement data using Data Director.

Increase Eighth grade Technology Literacy to 75%

High School Classes: Web Design I and Video Productions

Increase use of technology tools to enhance instruction

Timeline: 2014-2015

Track use of technology in content area such as projects, assignments, and skills assessed to complete a scope and sequence.

Continue use of Data Director for common assessments, monitor student performance, and student growth reports.

Increase Eighth grade Technology Literacy to 80%

Increase use of technology tools to enhance instruction.

High School classes: Web Design II and Basic Programming

Curriculum Technology Delivery

- *Strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance learning technologies are listed below.*

A video conferencing (distance learning) lab is available in the Junior/Senior High School. Advanced Placement classes may be offered in the distance learning room.

Video cart use for direct video broadcast throughout the building on classroom televisions continues to be available.

Wireless Network available District wide.

Laptop carts, IPAD carts and classroom computer stations are available in each building for student use.

Document Cameras (IPAD) and projector to create interactive whiteboards in classrooms.

Kindles are being used in the High School English classes as a textbook replacement or additional resource.

Audience Response Systems available in each building for classroom use.

Sound Amplification systems on all K-8th grade classrooms.

Use of Virtual High School is accepted as part of high school grade recovery or extension learning available to students.

Web based Grad Point is available for students to acquire credits either for credit recovery or advancement.

Connections Learning is available for students K-12th grade for online classes, taken at home or in school.

Web based research has been added to library and classroom instruction. (e.g. president report research in fifth grade, internet source for all research papers K-12, World Book Online).

United Streaming is available for all teachers to use as part of their instructional lessons.

Access to the internet, funded by USF, allows students to utilize all of the above mentioned programs.

Online testing is available to monitor student performance. (Data Director, SRI, Star Reading and Math)

All teachers are expected to establish an on-line presence from basic Google site to Protopage, blogs, facebook accounts, etc.

Curriculum

Parental Communications & Community Relations

- *Strategies to promote parental involvement and to increase communication with parents, including a description of how parents will be informed of the technology to be used with students as developed.*

Staff e-mail addresses are published yearly and disseminated to parents. Staff are encouraged to utilize e-mails to contact parents. Staff on-line presence for classroom information is expected.

The school web site is completed and updated frequently. The technology plan will be available to the community on the web site. The annual report for the district is available on the web site.

Highlights of new technology available in the district are made public at Board Meetings. Student demonstrations of units involving technology are highlighted at public Board Meetings. Parents are given the opportunity to contribute ideas and suggestions regarding planning, implementation, and assessment of the technology plan during District School Improvement Team meetings and Board meetings.

All students must sign and have their parents sign an Acceptable Use Agreement to use the internet. Parents have

access to student grades daily by an on-line grade book, Parent Connect.

To assess parental use of available technology to increase communication the following actions will be taken:

1. School wide twitter site to inform parents of activities for each building level.
2. Monitor number of parents using online grade book.
3. Complete parent survey to gain parental input.
4. District wide email at each building site.
5. District Facebook account
6. Elementary List Serve- parent email

Curriculum Collaboration

- *Strategies for developing the program, where applicable, in collaboration with adult literacy service providers was discussed.*

The community will be provided with opportunities to access available technology.

Already in place:

- Local groups may use computer labs, with prior approval, to complete activities requiring the use of technology.
- Supervised after school or evening open labs to complete required assignments are available upon request.

Planning for:

- Adult education classes offered for instruction in the use of technology. This program will become available as money to implement the program becomes available through grant or business sponsorship.
- The district budget does not currently support community adult education.
- Student computer access made available between the hours of 7am and 9pm.

Professional Development

Professional Development

- *Strategies have been developed for providing ongoing, sustained professional development for teachers, principals, administrators and school library media personnel to ensure that staff knows how to use the new technologies to improve education or library services.*

Training opportunities will be offered to staff members to review, update and extend their technological knowledge in order to build the groundwork for classroom integration of technology as opposed to strictly skill development. Learning opportunities will be selected based on requested areas or low areas on staff surveys and use with consideration given to the state and national standards for skill competency.

Teachers will be provided with updates of technology use required as part of their teaching assignment on a yearly basis. (on-line grade book, curriculum mapping, attendance, lunch counts, report cards, etc.)

Training opportunities will also be available for the staff through St. Clair County RESA.

- 2012-2013 Participation in county wide 21st Century Technology Professional Development
In service on technology skills: IPAD use, interactive whiteboards, audience response systems, Data Director
- 2013-2014 Yearly technology in service (21st Century or Local)
Provide professional development based on survey results from staff indicating need
Utilize training provided by St. Clair County RESA
- 2014-2015 Yearly technology in service
Provide professional development based on survey results.
Implementation "Skyward" to replace Zangle (Single Record of Student Data system currently in use)

Staff Development Plan for Technology Use

Memphis Community School District's plan is based on national and state standards for use of technology, by both educators and students.

Memphis Community Schools has divided staff use of technology into four levels. The first two are required of all staff. The third and fourth level applies to instructional staff and focus on full integration of technology into the curriculum.

Level 1 Essential Technology Competency

- Communicate through e-mail
- Report attendance and grades through the district system
- Use the telephone/voice mail system
- Use the district on-line grade book
- Provide students with the opportunity to use technology within the classroom
- Establish on-line presence (basic Google Site)
- Create bubble sheets for existing tests in Data Director
- Scan tests into Data Director
- Duplicate tests in Data Director

Level 2 Expanded Technology Competency

- Create documents for communication with parents, students and staff
- Use the Internet to access information
- Utilize technology for presentation purposes

- Create lessons that utilize technology in all content areas
- Use wireless laptop carts, IPAD carts, Audience Response Systems for classroom instruction
- Increase on-line presence to increase communication to parents, provide class expectations, and student resources
- Create and score tests in Data Director
- Administer on-line testing through Data Director
- Create reports in Data Director

Level 3 Technology Curriculum Integration

- Use a variety of instructional methods and student grouping strategies which take advantage of available technology
- Use technology tools to enhance instruction
- Establish Interactive on line presence
- Efficient in use of Data Director to create, score, and generate reports through Data Director.

Level 4 Technology Mentor/Leader

- Seek out new programs for evaluation and adoption
- Share successful lessons/units with peers
- Publish successful lessons/units through print and electronic media, and/or through conference presentations and workshops,
- Deliver staff development in areas of technology

State and national standards for teacher competency, as updated, will be used when obtained from the RESA consultants. (<http://iste.org/>)

Staff Development Strategies

1. Identify Groups of Staff for Technology Training
2. Assess Staff Technology Training Needs
3. Design Staff Professional Development Sessions
4. Plan Training Delivery Mode

Staff training will be offered in a variety of time frames and training environments. Planning may include: Summer Academy, After School Workshops, School Improvement Days, Professional Development Days, One-on-One training during preps, partnership with RESA, colleges, and outside training sources

5. Deliver Staff Training Sessions.
A calendar of training opportunities will be published and made available to all staff one or more times per year.
6. Assess and Evaluate Staff Training Process

Professional Development Supporting Resources

- *Memphis Schools have developed a list of strategies and supporting resources such as services, software, other electronically delivered learning materials and print resources that will be acquired to ensure successful and effective use of technology.*

Acceptable Use Agreement must be signed yearly by all employees, board members, volunteers, and non-student adults prior to use of District computers/technology.

Acceptable Use Agreement must be signed by parent and student yearly prior to use of District computers/technology.

Media Centers have a working relationship with other libraries within the county to share library materials. Each library within the district has an available software check out system.

Memphis Community Schools has a web site used to provide information to the community, updated by district and each building level.

Infrastructure, Hardware, Technical Support and Software

Infrastructure Needs/Technical Specification & Design

- *Strategies to identify the need for telecommunication services, hardware, software and other services to improve education or library services, and strategies to determine interoperability among the components of technologies to be acquired.*

Memphis Community School District currently maintains a Microsoft PC based network with 400 nodes. Staff and student PCs operate using the Microsoft Windows and Office programs. All PCs have virus protection software that is continuously updated to protect the integrity of the network.

The network structure contains five servers, switches, fiber optics, data disk backup, and approximately 400 PCs. Television, VCR/DVD players, and telephones are readily available in all classrooms. Future plans are for projectors and document cameras (IPADs)

Each building has a video surveillance system and building alarm system. School busses have digital cameras. Current technology acquired prior to 2012 has been updated and enhanced on a yearly basis.

Memphis Community Schools maintains a Technology Rotation Plan based on a four to six year schedule. Old equipment that is replaced will continue to be used until maintenance or repair costs exceed a feasible amount.

Memphis Community Schools is committed to providing technical support for acquired technology resources. The district has established a Technology Committee, comprised of the district technology coordinator, a curriculum representative, a board member, principals, and teachers, to review technology use and make recommendations for future needs.

The district technology coordinator, technology instructors, and consultants from the RESA will assist with the integration of technology application through the K-12 instructional program. They will provide training and modeling for staff in the use of technology resources.

Infrastructure, Hardware, Technical Support and Software Increase Access

- *Strategies to increase access to technology for all students and all teachers.*

Technology is available to all students and staff. Computer labs, Laptop carts, and IPAD carts are available to students K-12. Instruction in computers begins in kindergarten and continues through eighth grade with advanced classes offered in high school. Each teacher has classroom computer(s) available for use. Additional resources such as netbooks/tablets, and assisted technology are available for use through the Special Education or Technology Department .

Funding and Budget

Budget and Timetable

- *Timeline and budget covering the acquisition, implementation, interoperability provisions, maintenance and professional development related to the use of technology to improve student achievement.*

Projected Budget :

2012-2013

Support Services: \$96,735.00
Instructional Staff Salaries: \$175,000.00
K-5 Instruction Support: \$24,860.00
6-12 Instruction Support: \$34,666.00
Executive Administration Support: \$2,570.00
Support Services: \$18,312.00

2013-2014

Support Services: \$115,047.00
Instructional Staff Salaries: \$176,750.00
K-5 Instruction Support: \$24,860.00
6-12 Instruction Support: \$34,666.00
Executive Administration Support: \$3,000.00

2014-2015

Support Services: \$125,000.00
Instructional Staff Salaries: \$178,518,000.00
K-5 Instruction Support: \$24,860.00
6-12 Instruction Support: \$34,666.00
Executive Administration Support: \$3,000.00

A Bond was passed in 2012 to support purchase of needed technology.
Instructional Technology: \$321,500.00 (Interactive boards, portable electronic devices, portable electronic carts, laptops/carts, classroom computers, sound system, printers)
Bond money will be spent during the next three fiscal years to purchase technolog

Coordination of Resources

- *Strategies that will be employed to coordinate state and local resources to implement activities and acquisitions prescribed in the technology plan.*

General Funds will be used to replace computers, designated funds will be used for licensing fees, enhanced technology funds will be used for professional development, and USF will be used for internet connectivity and both district and cell phone system funds.

Monies from a Bond passed in 2012 will be used to purchase technology equipment, sound system, security cameras. IPAD carts, projectors, and computers.

Monitoring and Evaluation

Evaluation

- *Strategies that the district will use to evaluate the extent to which activities are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to reach challenging State academic standards.*

The District School Improvement Team will set standards for teacher expectations for computer/technology use in each classroom. The extent to which these standards are being used at each building level will be evaluated by the building principal. Teacher surveys will be completed on a yearly basis.

The following timeline described how the district will meet these requirements over the course of this current technology plan.

Students

2012-2013

Investigate evaluation tools for student proficiency in the use of technology

Analysis of eighth grade testing results

2013-2014

Review and revise evaluation tools.

Develop pre/post common assessment for computer classes to monitor student achievement

2014-2015

Administer common assessments

Staff

2012–2013

Conduct a staff survey of technology proficiencies.
Review staff survey results for use of technology to enhance instruction.

2013-2014

Provide professional development based on staff survey needs

Document teacher use of technology in delivery of instruction

2014-2015

Seventy-five percent of staff must meet Level 2

Provide remedial after school instruction for staff not meeting Level 2 expectations.

Monitoring and Evaluation

Acceptable Use Policy

- *Strategies are in place to monitor the district's Acceptable Use Plan for staff and student use of the technologies.*

An Acceptable Use Policy is in place for both students and staff. Copies are included in this plan.

Acceptable Use Agreements are signed by students, employees, board members, volunteers and non-student adults prior to gaining access to District computers and network.

VNC and LanSchool are used to monitor computer use and activity throughout the district. The superintendent and technology coordinator have district wide authorization. Principals have building rights. Classroom teachers have room rights. The St. Clair County RESA, as internet service provider, provides content filtering as required by CIPA. Filtered categories are determined and managed by the district.