



Shiawassee

Regional Education Service District

SHIAWASSEE REGIONAL EDUCATION SERVICE DISTRICT TECHNOLOGY PLAN

Shiawassee Regional Education Service District

1025 N. Shiawassee Street Corunna, MI 48817

(989) 743-3471 Fax: (989) 743-6477

<http://www.sresd.org/District/Department/6-Technology>

David Schulte, Superintendent

schulte@sresd.org

July 1, 2014 - June 30, 2015

Creation Date: April 2014

District Code 78000

CONTENTS

I: Mission Statement and Introduction – Background, Demographics and Overview.....	3
II: Technology Vision and Descriptions of Goals.....	5
III: Curriculum: Curriculum Integration	6
IV: Curriculum: Student Achievement – Assessment, Data Driven	8
V: Student Assessment.....	9
VI: Curriculum: Technology Delivery – Distance Learning, Video, Online Courses.....	10
VII: Curriculum: Parental Communications and Community Relations.....	11
VIII: Curriculum: Collaboration	11
IX: Professional Development: Strategies for Providing Ongoing Innovation and Integration of Technology.....	12
X: Professional Development: Supporting Resources – Software and e-Learning	12
XI: Infrastructure: Hardware, Technical Support, and Software	13
XII: Infrastructure: Hardware, Technical Support, and Software: Strategies to Increase Access	13
XIII: Funding and Budget: Budget and Timetable (24 & 25)	14
TIMELINE	14
BUDGET	15
XIV: Funding and Budget: Coordination of Resources.....	16
XV: Monitoring and Evaluation: Evaluation.....	16
XVI: Monitoring and Evaluation: Acceptable Use Policy	17
Appendix A: County-wide Technology Committee.....	18
Appendix B: The SRES D Technology and Support Services:	19
Appendix C: Integrated Technology Sessions Offered.....	20
Appendix D: Student Acceptable Use Policy	21
APPENDIX E: Staff Acceptable Use Policy	23
APPENDIX F: US National technology Plan	24
APPENDIX G: References	24

I: MISSION STATEMENT AND INTRODUCTION – BACKGROUND, DEMOGRAPHICS AND OVERVIEW

The Mission of the SRES D is: *To provide direct and collaborative services that support quality learning environments.*

INTRODUCTION

We are living in an increasingly and globally competitive world where advances in technology offer new, challenging and innovative opportunities for teaching and learning. New knowledge and skills are necessary for educators, students, and the community to meet the challenges of the global economy. Some of the challenges we face in Michigan include: low graduation rates, increased academic standards for graduation, diminishing economic resources for our school districts. These issues are compounded by the psychological and financial demands on our students and their families.

Technology plans are not stand-alone documents; technology planning for curriculum integration, physical plant upgrades and countywide collaborative efforts must be undertaken in coordination with school improvement plans.

The SRES D does local service planning (LSP) with constituent districts. This process focuses on the needs of individual districts, and technology is viewed through the core content areas. The Countywide Curriculum Council reviews this information, and sets goals for achieving desired outcomes.

Demographics

The SRES D services eight local school districts and eight nonpublic/parochial schools within the Shiawassee County with a total of approximately 12,582 students with 687 teachers, administrators, and staff. This encompasses 44 buildings plus support facilities. The SRES D has five locations that offer programming. The role of the SRES D is to service and support local district functions in planning and implementing technology through visioning, planning, coordinating, cooperating, brokering, facilitating, supporting School Improvement Plans, and providing needed services locals are not able to do themselves. Providing services in this type of cooperative arrangement ensures the smooth operation and interoperability of the network.

Overview

The local districts that the SRES D serves provide input into the research, evaluation and decision-making process for the projects addressed in this Technology Plan. The projects provide the local districts with the resources to achieve and implement the State standards for students and staff, and also to expand their services to parents and other community members. The SRES D provides leadership to the districts and community through collaboration and by modeling best-practices. Services provided are of a high quality and include a fiber-optic network, broadband and Internet services, filtering, professional

development, curriculum consultation, and coordination of variety of resources for students and their families. Local district input and direction is provided through an annual survey and Local Service Planning meetings with the individual districts to discern their needs and how the SRES D can provide and improve services to meet their needs. Regular meetings with the district technology directors and representatives are an integral part in planning and providing technology services. In 2007 the SRES D began a collaboration of services with Clinton County RESA, which has been expanded to include the sharing of administration personnel, support staff, professional development, data analysis and assessment, and curriculum support.

The SRES D is committed to provide professional development opportunities for teachers to be able to embrace methods and strategies which are needed to effectively engage and educate the 21st Century learners and help them in mastering state and national standards.

One of the major projects the SRES D has undertaken is to assist districts in creating a “Culture of Quality Data” that will inform and guide decision-making that impact student achievement. A data management system was deployed county-wide in 2008-09 (TetraData) to provide a means for looking at trend data from multiple sources across the four types of data (demographic, achievement, perception and process). The system currently being utilized for this need is Data and Assessment (DnA) from Illuminate Education. The major focus for this next year is to support districts in the use of both formative and summative assessments through the use of tools that provide students with immediate feedback, such as GradeCam and Online assessments within Illuminate DnA, as well as, ExamView assessments, Classroom Response Systems, Interactive whiteboards, 1:1 computing (computers and iPads) and content management systems (Moodle). As well, districts will be trained to use the data from classroom assessments, common assessments and standardized assessments to inform classroom instruction, to improve curriculum and to change school and district processes. School and District Improvement teams will be coached to use classroom, building and district data to set measurable goals as part of their school improvement planning.

Technology is a vital means of the SRES D's plan to meet this mission. We currently support a fiber optic 10Gbps network to our local districts, and provide the infrastructure support to local districts up to and including operation of their LAN. We have entered into an agreement to increase the bandwidth to support future demands. Our districts are increasingly expanding the access to Internet and online resources which requires higher and more robust bandwidth to support the teaching and learning environment.

The SRES D is committed to explore and embrace emerging technologies that support the mission statement and meet individual needs of the students and districts we serve. The PEW Internet and American Life research reports and the Horizon annual reports indicate the explosive growth of student use of the Internet as well as upcoming technologies that impact education. The SRES D provides leadership to the districts in implementing new and innovative methods to engage all students with emphasis on improving student achievement and development of 21st century literacy skills. To address these needs it is important for classrooms to have projection and sound systems, software and technologies that allow all students to have equitable access to information and digital resources.

II: TECHNOLOGY VISION AND DESCRIPTIONS OF GOALS

A Shared Vision

Instructional, curriculum and administrative applications of technology must drive decisions related to the acquisition of new technology and subsequent activities that provide staff training and professional development in the use of technology, and integration within the classroom. In its leadership role within Shiawassee County, the Shiawassee Regional Education Service District (SRES D) recognizes that there must be a systemic approach to the integration of technology. The integration of technology throughout the school and educational environment has been demonstrated by research to have a positive impact on student achievement. According to research, technology-rich schools generate impressive results for students, including improved achievement, higher test scores, improved student attitude, enthusiasm, engagement, collaboration, richer classroom content and improved student retention and job placement rates. The opportunities provided through the integration of technology across the curriculum are critical for success in the 21st century global community and workforce.

We have identified the following six goals:

1. To provide leadership, data analysis, and management mechanisms to support students, teachers, and administrators in the application of technology on a timely, reliable, and productive basis.
2. To deliver educational content digitally to students, which enhances adopted curriculum(s) throughout the SRES D and local districts.
3. To explore, innovate, and challenge existing technology practice and application through excellent and innovative staff development targeted to meet district needs.
4. To provide technology infrastructure that will allow the SRES D and the local districts to deliver high quality voice, video, and data services to improve and enhance K-12 instruction. This will include a robust WiFi infrastructure.
5. To provide network and broadband infrastructure that will support productivity and the efficient use of advanced information tools in the administration of school operations.
6. To support collaboration and communication within districts, and between staff, students and their parents, and the community.

To meet our mission, goals and objectives, the following resources were included in the development of this Plan:

- Michigan Educational Technology Standards (METS)
- Michigan State Technology Plan
- ISTE National Standards for students, teachers and administrators
- Michigan Merit Curriculum (MMC), Michigan Grade Level Content Expectations (GLCE), and high school content expectations (HSCE)
- PEW Internet and American Life Report 2012
- Horizon Report, 2012

III: CURRICULUM: CURRICULUM INTEGRATION

To meet goals two and three, the SRES D strives to model the integration of technology into all subject areas. This is accomplished by educating or training individuals in the environment where they will be using the technology, as well as focusing on topics that are apropos to their daily work. Through our work in the content areas, technology is integrated into all professional development offered by the SRES D. The METS (available at www.techplan.org, METS-S and NETS-T) are used as guiding tools as well as the Michigan State Technology Plan. We make use of a variety of resources to assist in this work: the Michigan Department of Education (MDE), the Regional Education Media Center Association of Michigan (REMC), REMC Instructional Technology Specialists (RITS), curriculum specialists and educational staff in our county.

Especially For Students:

- Moodle Content Management is used for communications and to coordinate a special program for students that excel academically, “Shiawassee Scholars.”
- Students are meeting the “Online learning requirement for graduation” through many of the Career Technology Education (CTE) Programs in the county. A county-wide effort has been bringing different groups of the CTE staff together to put their curriculum online in Moodle. The content and course environment are aligned to the CTE and METS-S standards. Each year additional CTE programs are being enhanced through this online environment.
- Students are benefitting from the integrated approach to professional development across content areas, as the staff are increasingly building more comfort in using and integrating technology into their curriculum activities.
- Students are able to receive instant feedback on formative and summative assessments as teachers are incorporating Illuminate GradeCam scanned assessments and online assessments into their instruction. Students are able to analyze their assessment results through the data displayed in the Illuminate Student Portal.
- Students are increasing their technology proficiency through the lessons and activities in 21 Things for Students.

Addressing All Learners

Students with Learning Disabilities can master complex problem-solving skills as well as other students with the support of educational technology.⁹In some cases, these students exhibit unique facility with technology and become highly valued tutors within the classroom. Word processors, teamed with carefully guided instruction, have enabled some students with learning disabilities to write well-reasoned and organized reports.¹⁰ Studies of students with learning disabilities show that technology can expand access to educational resources and enhance students’ ability to process and remember information.¹¹

- The SRESD hosts an Assistive Technology team which meets to share and learn new strategies for applying existing and new technologies in innovative ways to address student learning needs.
- The SRESD technical staff supports districts in the installation and use of special equipment and software. A lending library of technologies (switches and devices) is available for sign-out to the districts. Premiere Assistive screen reading software has been implemented in several districts.
- Differentiated Instruction strategies and web tools have been included in training for teachers in content areas. The use of NetTrekker has been demonstrated through modeling and practice.
- Research and application of special strategies to meet the needs of male learners has been provided through professional development and modeling in our “Boys N Bytes” sessions.

Especially for Classroom Educators:

The SRESD provides teachers and support staff with a wide variety of curriculum, assessment, and data analysis training opportunities where technology is embedded throughout all of the professional development training. The Local Service Planning process, Curriculum Council, and Principals’ input, help target the professional development opportunities provided by the SRESD to meet specific curricular areas to improve student achievement. A sample of the SRESD professional development programs is attached as Appendix C. This represents a variety of our program offerings. Following are some of the priority areas targeted:

- Writing continues to be an area of priority particularly in light of the technology requirements of the Common Core State Standards being implemented and the anticipated SMARTER Balanced Consortium Assessments. With the new curriculum and assessments, students are expected to demonstrate writing proficiency using digital technologies. Additionally, studies have shown that students produce more writing of increased quality when they use computers to compose and edit. To meet this priority, a variety of professional development is being offered
 - o Literacy Leaders
 - o Argument Writing using MAISA units
 - o Preparing for the SMARTER Balanced Consortium Assessments
 - o Project WRITE
 - o Boys n Bytes
 - o Implementing the CCSS 8 Mathematical Practices
- Continue to offer trainings to support the use of PowerSchool for our local districts
- In the Fall of 2010, Shiawassee RESD joined six other ISDs in the development of a Moodle Consortium. In the Spring of 2011, Blackboard content was converted to Moodle 1.9 and teachers were transitioned from Blackboard to Moodle use. Blackboard was totally phased out as of June 30, 2011. Over the summer of 2013, Moodle will be upgraded to version 2.4.. During the next year, Shiawassee RESD will continue to support teachers throughout the county in expanding their expertise and use of Moodle as their content management system.

- Continue to expand the use of the Moodle online course management tools. e.g. Many of the CTE courses in the county are using Moodle to host their course materials and to meet the online learning requirement of the state.
- Provide leadership and training to support district initiatives
- Provide leadership and support for the implementation and integration of the METS standards adopted 2009. Continue to provide support and training in the use of technology with the Common Core State Standards and the Smarter Balanced Assessments which will begin in Spring 2015.
- Continue to offer training and support for technology integration to teachers and administrators through 21 Things for Educators and 21 Things for Administrators. These courses are offered up to three times per year. Educators are able to take the courses for either SCECHs or graduate credit. SRES D staff takes part in teaching these courses.

IV: CURRICULUM: STUDENT ACHIEVEMENT – ASSESSMENT, DATA DRIVEN

Research has shown that to make a systemic change in school systems the administrators are a key element. To meet the first three goals, the SRES D provides customized professional development opportunities with input from the administrators across our county, to meet the challenge for improving student achievement, and implementing assessment and data driven decision-making. Some of these opportunities we are carrying out include:

- MI School Data
- Data Warehouse training
- Advanced ED / ASSIST
- School Accountability
- Data Analysis with Illuminate Assessments
- School Improvement Planning Template Support
- PowerSchool Training
- Moodle Training
- Perception Surveys
- NIMS
- County-wide Professional Development Planning with curriculum directors
- County-wide Superintendent Planning

The implementation and integration of technology across the curriculum, helps ALL students to master and meet academic standards and skills required for success in the 21st century. The SRES D provides leadership and support to the districts in this endeavor.

Strategies the SRES D Implements to Support and Improve Student Achievement:

- Participates in funding the Discovery Education content for the classroom teachers, which includes a library of streaming video resources, online quizzes and assignments to meet Michigan curriculum standards. (National Tech Plan Action Step 6, move toward digital content)

- Supports student access to research resources through Horizon, which is an Automated Library System that helps prepare students for lifelong learning. (National Tech Plan Action Step 6, move toward digital content)
- Supports student and teacher access to Compass Learning, which includes engaging digital curriculum and offers comprehensive reporting features to assess progress and inform instruction. (National Tech Plan Action Step 6, move toward digital content)
- Opportunities to meet the online learning requirement for graduation are provided through locally teacher-delivered blended classroom content through Moodle. (National Tech Plan Action Step 4, support e-learning)
- Provides coordination and oversight of the county-wide Career and Technology Education courses, offering content, collaboration, and assignments in an online blended course management system. (National Tech Plan Action Step 4, support e-learning).
- Provides training and facilitation for EDP and career exploration opportunities, including access to Career Cruising. (National Tech Plan Action Step 1. Strengthen Leadership, Step 3. Improve Teacher Training, Step 4. Support E-learning, and Step 6. Move Towards Digital Content.)
- Provides leadership for county-wide Internet safety and digital citizenship awareness and curriculum.
- Provides support for a centralized video surveillance system to allow for archiving of information and interaction with law enforcement agencies in disaster planning and school safety. (National Tech Plan Action Step 2. Innovative Budgeting and Step 7. Integrate Data Systems).
- Provides a county-wide data warehouse that can disaggregate data at the county, district, building, classroom and student level. This system is used to monitor and improve student achievement in all areas in relation to many factors including socio-economic, attendance, grades, MEAP scores, expenditures, teacher factors, and discipline to name a few. (National Tech Plan Action Step 1. Strengthen Leadership, Step 6. Move toward digital content, and Step 7. Integrate Data Systems).

V: STUDENT ASSESSMENT

Technology offers several advantages over traditional methods of student progress assessment. For example; multimedia technology expands the possibilities for more comprehensive student assessments that require students' active participation and application of knowledge. The immense storage capacity enabled by technology such as cloud based storage, DVDs and flash drives, allows schools to develop electronic portfolios of students work. Work samples are saved at different times during the year, and teachers can display them in rapid succession to demonstrate and assess student improvement. As an assessment tool, technology yields meaningful information on-demand about students' progress and accomplishments, and provides a medium for its storage. As a motivational tool, technology provides instant feedback and positively affects student attitudes toward learning, self-confidence, and self-esteem. The SRESD will continue efforts begun in 2008 to use ExamView, Moodle and other technology resources to assist teachers in creating and using formative,

summative and common assessments. ExamView licensing has been purchased for each teacher station in our eight districts, and a scanner has been purchased for each building. In July 2012, Illuminate DnA was purchased county-wide. This provides districts with both a data warehouse and an additional assessment tool that makes classroom assessment data available within the data warehouse. Teachers can manually enter student assessment data and use the GradeCam scanning feature or the online assessment feature to provide instant feedback to students. A variety of pre-built reports that populate after each assessment provide teachers with an easy way to analyze their data to improve instruction and learning in their classrooms. The SRES D will continue to develop a comprehensive assessment program in cooperation with SRES D programs and local district needs.

The SRES D currently has county-wide end-of-year assessments for Math (K-8), Writing (2-8), as well as end-of-course assessments for Algebra I, Biology, Geometry and English 9 and ACT prep assessments in ExamView format. More assessments will be added as available and needed. This indicates a need for additional improvement in technology literacy across the county. The SRES D also coordinates staff, student, parent and community surveys on-line for our local districts.

VI: CURRICULUM: TECHNOLOGY DELIVERY – DISTANCE LEARNING, VIDEO, ONLINE COURSES

The SRES D, goal two, is focused on the digital delivery of educational content to enhance curriculum throughout the SRES D and local districts. Research has shown that by incorporating pictures, sound, and animation in classroom activities, multimedia significantly enhances students' recall of basic facts, as well as their understanding of complex systems.⁵ The SRES D partners with local districts in providing local access to video streaming, curriculum resources, and assessment activities from the Discovery Education Company.

Distance learning, delivered via live interactive transmissions, improves student achievement at least as much as traditional methods of instruction. Online courses offer the opportunity for students to take classes anytime, anywhere. In addition, particularly for students in rural or remote schools, distance-learning technology expands student access to the core curriculum by enabling students to take classes not typically offered at their own schools. In many cases, the instruction students receive is of high quality, because distance-learning courses can attract exceptional teachers and content experts.

Shiawassee Interactive Television Education System SITES connects schools across the county to allow interactive teaching among schools, giving students access to a greater diversity of curriculum. Developed and maintained by the RES D, SITES is recognized for its creative and economical approach to sharing resources through technology and has received commendation at both the state and national levels.

Instructional Technology provides training for educators and assists schools in planning technology use in the classroom as well as helping in the development of effective technology plans for the local districts.

VII: CURRICULUM: PARENTAL COMMUNICATIONS AND COMMUNITY RELATIONS

Technology offers new and exciting ways for families to increase their involvement in their children's education. The SRESD provides the infrastructure for: web-based information, online course management system access, telecommunications and email capabilities with districts.

Strategies to provide and enhance communications:

- Communications and learning are extended to the home environment for parents and students through multimedia resources (Symphony System and Discovery Education) and Moodle. Example: student access to video streaming
- The SRESD website (www.sresd.org) provides information to parents and the community. Additionally, the SRESD has an adaptive technology committee that has developed a lending library for both schools and parents, and has made the materials available for checkout through the web.
- The SRESD leads a county-wide effort focused on Internet Safety. The RESD hosts meetings to discuss ways to keep kids safe online, and to educate them on proper ethical use of the Internet.
- The SRESD updated their phone system during the 07-08 school year to provide increased access for both staff and parents. The SRESD will continue to monitor the system to determine if further updates and improvements are needed. There are approximately 200 employees serving thousands of families, and communication systems are critical to servicing the community. Additionally, the SRESD serves students in two LATAs and three area codes. This necessitates many local and long distance calls to keep families informed. During the 08-09 school year, many of the local districts began utilizing the Honeywell Instant Alert System. This system allows instant communication to parents in multiple ways including voice, text messaging, and work calling regarding critical information about any school situation. This deployment included training as well as ongoing support.
- The SRESD supports the Student Information System (PowerSchool) for seven of our local districts. The Parent portal, available over the Internet, allows parents to have real-time information regarding their student's grades, attendance and class announcements. The SRESD will continue to provide training and support for our SIS.
- The SRESD provides support to student and community programs such as the Shiawassee Scholars program for academically talented high school students

VIII: CURRICULUM: COLLABORATION

Adult Literacy

The SRESD works with the Shiawassee Adult Literacy Council in providing support to their activities. The activities and scope of this group is limited, but all opportunities are taken to engage with them when and where appropriate.

IX: PROFESSIONAL DEVELOPMENT: STRATEGIES FOR PROVIDING ONGOING INNOVATION AND INTEGRATION OF TECHNOLOGY

The SRESD has embedded the use of technology throughout all of the training offered, which is aligned to the NETS-T and State standards. A sample of the SRESD professional programs is attached in the Appendix C.

Strategies

- To provide training opportunities where teachers, administrators, and support staff can participate in a wide variety of curriculum, assessment, and data analysis.
- To facilitate the development of professional learning communities
- Continue to offer the 21 Things for Teachers, 21 Things for Administrators, and 21 Things for Students to Shiawassee districts. SRESD staff take part in teaching these courses.
- To provide leadership and support in the integration of Web 2.0 tools to support the curriculum and for improving collaboration.
- To provide training and support in the use of data reporting and management tools
- To provide ongoing training and support for the use of online course management tools - e.g. Moodle, and CTE blended courses.
- To provide leadership and guidance in the development of standards-based report cards
The RESD also provides access to a CD/DVD duplicator and printer, Projectors, Classroom Performance Systems, Digital video and still cameras, PA system, Poster Plotter, and laminating and stenciling equipment that all schools can check out, receive via courier service or use in the teacher center at the SRESD.

X: PROFESSIONAL DEVELOPMENT: SUPPORTING RESOURCES – SOFTWARE AND E-LEARNING

The SRESD is committed to providing high quality professional development that is targeted to meet the needs of the educators in our county. This is accomplished by educating or training individuals in the environment where they will be using the technology, as well as focusing on topics that are apropos to their daily work. Through our work in the content areas, technology is integrated into all professional development offered by the SRESD. We also are partnering with a variety of ISD's to expand the resources and training we offer (i.e. our partnership with CCRESA). To economically provide a course management system for students and teachers, we are in a partnership with Ingham ISD for the use of Moodle. Shiawassee hosts and offers training using REMCs 21Things courses. There are currently three 21Things course offerings (one for teachers, one for administrators, and one for students. We plan to continue to offer the 21 Things for Teachers, 21 Things for Administrators, and 21 Things for Students to Shiawassee districts. SRESD staff take part in teaching these courses.

We expect these types of online professional development opportunities will grow dramatically over the next year.

XI: INFRASTRUCTURE: HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE

The SRES D provides the following services:

- DNS hosting, DHCP to districts across 2000+ filament miles of fiber optic cable
- 10 Gbps network connectivity to all districts, with 99% DataNet uninterrupted service time
- Support, management and backup for 50+ central servers
- Central WAN/LAN delivery of the following:
 - Document imaging system (CEO)
 - Student Management System (PowerSchool)
 - Data warehouse system for all districts (Illuminate DnA)
 - Financial and payroll system and state REP reporting (MicroSage)
 - Data submission for the homeland security and messaging alert system
 - Pupil accounting submission data
 - Microsoft Updates (WSUS)
 - Automated library system (Symphony)
 - User and shared file service
 - Centralized sub-calling system and support
- Security, Filtering and Firewall management:
 - Filtering of Internet traffic to meet and exceed CIPA requirements
 - Firewall management, Antivirus protection
 - Homeland security camera system
- Technical support of the connectivity and equipment for 100 students in the SITES classes/3 class offerings on SITES system and virtual fieldtrip coordination
- Technical support to local districts using a shared services approach for cost savings
- Professional development and educational technology services:
 - Professional development, web conferencing and virtual support
 - Online classes from the SRES D and State-wide Seat Time Waiver Program
 - Discovery Learning Video access to all schools
 - Course Management System (Moodle) access to all public and parochial schools
- Community connectivity services provided:
 - Public libraries, City Police (Owosso), Shiawassee County Sheriff, Detention Center online arraignments, Baker College, 911, local hospital urgent care

XII: INFRASTRUCTURE: HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE: STRATEGIES TO INCREASE ACCESS

Technology plans are not stand-alone documents; technology planning for curriculum integration, physical plant upgrades and countywide collaborative efforts must be undertaken in coordination with school improvement plans. The SRES D manages and provides a variety of WAN services for the districts.

- The Shiawassee County School Districts use an automated absence management system which is operated by the SRES D and offers a help desk for district needs. The Aesop system, which is a

web based database, records teacher absences and individually calls and schedules substitutes. This program allows substitutes to proactively search and accept jobs via the web or phone. Throughout the county this system allows both accessibility and ease for the person at the building level and for substitutes.

- Microsage for the Financial and Human Resource needs.
- PowerSchool
- The SRES D provide special education services to approximately 2000 students countywide. Technology is always part of the tools available during the development of a student’s IEP, and is utilized where appropriate.
- There are six schools involved with MiBLSi trainings in the current cohort groups. Eight additional schools from previous cohorts, are involved with continuation of the MiBLSi model.
- Professional Development Registration and Invoicing System (ABC Signup)

To provide these services across the WAN, and meet the increased demands from districts to support student achievement and learning, we are increasing the bandwidth of the Internet services provided. Access must be provided to educational resources during times of the day, week and year when school is not in session, since student learning is not an exercise restricted to the traditional school day.

Equitable Access and District Guidelines:

Schools must strive to remove all identifiable gender, racial, cultural, disability or similarly based barriers in providing student, teacher and staff access to, and support for participation in, technology-based learning environments.

All school districts should establish a process and written guidelines to provide consistency in the delivery of assistive technology services and devices to individuals with disabilities.

XIII: FUNDING AND BUDGET: BUDGET AND TIMETABLE (24 & 25)

In 2007 the SRES D began a collaboration of services with Clinton County RESA, which has been expanded to include the sharing of administration personnel and integration of technology which has been embedded into the professional development and curriculum support through 2014-2015.

*Timeline for implementation of activities to support the sections mentioned above.

TIMELINE 2013 - 2014

Timeline for Implementation of Curriculum-Related Strategies

July 2014 – June 2015	Working with vendors, work on getting fiber optic connectivity between SRES D and CCRESA
	Continue to offer the exploration of assessment options with the use of 21 Things for Students program
	Continue to provide county-wide end of year assessments
	Continue deployment of the Data Warehouse and build more expertise in applying data analysis techniques to impact teaching and learning
	Continue to support PowerSchool and assist them in building Standards based Report Cards
	Build upon and expand the assistive technologies available across the county

	Provide support and training of scanned and online assessments
	Provide training for the Moodle Course Management System to staff across all districts
	Evaluate and expand on the online professional development opportunities offered to staff
	Work with consortium of local districts on the expansion of our wireless infrastructure
	Continue the county-wide Internet Safety Implementation Team work and expand the focus for digital citizenship, cyber bullying and social networking
	Offer trainings for the use of iPads
	Develop a County Technology Leadership Team
	Work with Curriculum Council and Technology Director committees for integrating new technologies and systems including: (projection systems, classroom response systems, mobile technologies, 1:1 computing, digital monitoring for student safety, iPads, etc.)
	Continue offering the 21Things Professional Development for Teachers, Administrators and Students

BUDGET 2014-2015

Media and Technology	\$333,810
Distance Learning/SITES	\$105,458
Technology Planning	\$126,607
Sub Calling	\$94,097
Network Services	\$1,214,216
Total	\$1,874,188

All sections include costs related to salaries/benefits, hardware and networking, maintenance and service, license agreements, software and professional development, and technical support within each budget area.

XIV: FUNDING AND BUDGET: COORDINATION OF RESOURCES

Source of resources for projects:

SRESD General Fund and SITES Consortium Operation and Maintenance Fund
Continued leveraging of grants and E-rate funds
Multi-county Consortium
Shiawassee RESD/Clinton County RESA Partnership

The SRESD and local schools have participated in the E-rate program since its inception. These funds have been used to accelerate the deployment of technology to support instruction. The SRESD has maintained a strong connection with the community throughout its existence and works cooperatively with partners to enhance programs and revenue opportunities. A healthy relationship with our Regional Chamber of Commerce allows for input and guidance in critical areas for student achievement post-graduation. The SITES Consortium maintains funds in reserve to deal with unforeseen emergencies, and to ensure sustainability of the network. The partnership with Clinton County RESA has reduced costs for some personnel at both sites. We are currently working to connect the two organizations together via fiber. This will allow us to collaborate on data center operations and save on costs.

XV: MONITORING AND EVALUATION: EVALUATION

Monitoring/Evaluation Process

The SRESD Technology Planning Committee and the Joint Network Operating committee monitor the performance of the technology plan. All academic buildings and most support buildings have been connected to wide area network. Since we have accomplished providing access to all students and staff in classrooms, the second phase of this plan will focus on delivery of all services to the desktop. These committees meet at least quarterly, and more often as needed.

A system is in place to monitor teacher input of all offered training. Participant evaluations have rated these programs consistently as excellent. This formative evaluation will continue. A significant number (approximately 60%) of all training now occurs in local districts.

The SRESD has developed an instructional services delivery model. This model focuses on developing local service plans with our constituent districts based on their schools improvement and strategic planning goals. Their individual needs, in cooperation with SRESD plans, encompass our regional technology plan. These plans are evaluated through the SRESD balanced scorecard as part of our continuous improvement process.

Evaluations will be based on the following:

1. evaluations completed by the member school districts
2. research required for completion of projects
3. implementation of projects
4. completion of projects

5. participation in projects of local school district staffs, students and parents
6. evaluations completed by attendees at staff development activities.

This plan is monitored through the County-wide Curriculum and Instruction Council (CILC) and the SITES Consortium Board with quarterly updates. The local service planning process occurs annually. Unmet goals are reviewed for appropriateness, and a decision is made to continue, modify, or eliminate the goal.

XVI: MONITORING AND EVALUATION: ACCEPTABLE USE POLICY

The SRES D has implemented a county-wide filtering program compliant with CIPA requirements. Additionally, our Acceptable Use Policy focuses on Internet Safety, and the educational use of our system. The AUP is monitored through review of Internet traffic information, and when necessary, with individual staff and/or students. The SRES D operates a M86 WFR R3000 filtering and reporting appliance that is used by all local districts and the SRES D.

APPENDIX A: TECHNOLOGY PLANNING COMMITTEE

Jackie Carstens, Technology

Valerie Coffey, Instructional Technology

Sheila Dunham, CTE

Susie Honsinger, Business Office

Royce Humm, Technology

Kathleen Miller, Instruction

Sue Stephens, Instruction

Chris Suire, Technology

Lisa Sutphen, Technology

John VanWagoner, Instruction

Brenda Cook, Special Education

APPENDIX B: THE SRESD TECHNOLOGY AND SUPPORT SERVICES:

The SRESD provides the following services:

- DNS hosting, DHCP to districts across 2000+ filament miles of fiber optic cable
- 10 Gbps network connectivity to all districts, with 99% DataNet uninterrupted service time
- Support, management and backup for 50+ central servers
- Central WAN/LAN delivery of the following:
 - Document imaging system (CEO)
 - Student Management System (PowerSchool)
 - Data warehouse system for all districts (Illuminate DnA)
 - Financial and payroll system and state REP reporting (MicroSage/EmployeeWeb)
 - Data submission for the homeland security and messaging alert system
 - Pupil accounting submission data
 - Microsoft Updates (WSUS)
 - Automated library system (Symphony)
 - User and shared file service
 - Centralized sub-calling system and support
- Security, Filtering and Firewall management:
 - Filtering of Internet traffic to meet and exceed CIPA requirements
 - Firewall management, Antivirus protection
 - Homeland security camera system
- Technical support of the connectivity and equipment for 100 students in the SITES classes/3 class offerings on SITES system and virtual fieldtrip coordination
- Technical support to local districts using a shared services approach for cost savings
- Professional development and educational technology services:
 - Professional development, web conferencing and virtual support
 - Online classes from the SRESD and State-wide Seat Time Waiver Program
 - Discovery Education Video access to all schools
 - Course Management System (Moodle) access to all public and parochial schools
- Community connectivity services provided:
 - Public libraries, City Police (Owosso), Shiawassee County Sheriff, Baker College, 911, local hospital urgent care

APPENDIX C: INTEGRATED TECHNOLOGY SESSIONS OFFERED

Below is a partial list of “Integrated Technology” sessions offered in 2011-2012. As our focus has been on integrating technology throughout all of our Professional Development curricular areas, we no longer provide many isolated “technology” PD’s.

Moodle Training
Assessment with ExamView Session
Assessments with Illuminate
Data Warehouse 101
Power School Workday for Counselors @ SRES
21 Things for the 21st Century Educator
21 Things for the 21st Century Administrator
21 Things for the 21st Century Student
CyberSchool Training
Technology Plan Meeting @ SRES
iPad Training
Edline Training @ Corunna
Einstruction Mobi Training
Einstruction CPS Training
SMART Board Training
Discovery Education Training
Blended Learning in the Classroom (BLiC)

APPENDIX D: STUDENT ACCEPTABLE USE POLICY

© NEOLA 2003
7540.03 F1/page 1 of 2

STUDENT NETWORK AND INTERNET ACCEPTABLE USE AND SAFETY AGREEMENT

To access e-mail and/or the Internet at school, students under the age of eighteen (18) must obtain parent permission and must sign and return this form. Students eighteen (18) and over may sign their own forms.

Use of the Internet is a privilege, not a right. The Board's Internet connection is provided for educational purposes only. Unauthorized and inappropriate use will result in a cancellation of this privilege.

The Board has implemented technology protection measures which block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board also monitors online activity of students in an effort to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. Nevertheless, parents/guardians are advised that determined users may be able to gain access to information, communication and/or services on the Internet which the Board of Education has not authorized for educational purposes and/or which they and/or their parents/guardians may find inappropriate, offensive, objectionable or controversial. Parents/Guardians assume this risk by consenting to allow their students to participate in the use of the Internet. Student's accessing the Internet through the school's computers assume personal responsibility and liability, both civil and criminal, for unauthorized or inappropriate use of the Internet.

The Board has the right to monitor, review and inspect any directories, files and/or messages residing on or sent using the Board's computers/networks. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.

Please complete the following information:

Student User's Full Name (please print): _____

School: _____ Grade: _____

Parent/Guardian's Name: _____

Parent/Guardian

As the parent/guardian of this student, I have read the Student Network and Internet Acceptable Use and Safety Policy and Guidelines, and have discussed them with my child. I understand that student access to the Internet is designed for educational purposes and that the Board has taken available precautions to restrict and/or control student access to material on the Internet that is obscene, objectionable, inappropriate and/or harmful to minors. However, I recognize that it is impossible for the Board to restrict access to all objectionable and/or controversial materials that may be found on the Internet. I will not hold the Board (or any of its employees, administrators or officers) responsible for materials my child may acquire or come in contact with while on the Internet. Additionally, I accept responsibility for communicating to my child guidance concerning his/her acceptable use of the Internet - i.e., setting and conveying standards for my daughter/son to follow when selecting, sharing

and exploring information and resources on the Internet. I further understand that individuals and families may be liable for violations.

© NEOLA 2003
7540.03 F1/page 2 of 2

To the extent that proprietary rights in the design of a web site hosted on the Board's servers would vest in my child upon creation, I agree to assign those rights to the Board.

Please check each that applies:

- I give permission for my child to use and access the Internet at school and for the Board to issue an Internet/e-mail account to my child.
- I give permission for my child's image (photograph) to be published online, provided only his/her first name is used.
- I give permission for the Board to transmit "live" images of my child (as part of a group) over the Internet via a web cam.
- I authorize and license the Board to post my child's class work on the Internet without infringing upon any copyright my child may own with respect to such class work. I understand only my child's first name will accompany such class work.

Parent/Guardian's Signature: _____ Date: _____

Student

I have read and agree to abide by the Student Network and Internet Acceptable Use and Safety Policy and Guidelines. I understand that any violation of the terms and conditions set forth in the Policy and Guidelines is inappropriate and may constitute a criminal offense. As a user of the Board's computers/network and the Internet, I agree to communicate over the Internet and the Network in an appropriate manner, honoring all relevant laws, restrictions and guidelines.

Student's Signature: _____ Date: _____

Teachers and building principals are responsible for determining what is unauthorized or inappropriate use. The principal may deny, revoke or suspend access to the Network/Internet to individuals who violate the Board's Student Network and Internet Acceptable Use and Safety Policy and related Guidelines, and take such other disciplinary action as is appropriate pursuant to the Student Code of Conduct.

APPENDIX E: STAFF ACCEPTABLE USE POLICY 7540.04 F1/page 1 of 1

STAFF NETWORK AND INTERNET ACCEPTABLE USE AND SAFETY AGREEMENT

To access e-mail and/or the Internet at school, staff members must sign and return this form. **Use of the Internet is a privilege, not a right. The Board's Internet connection is provided for business and educational purposes only. Unauthorized or inappropriate use will result in a cancellation of this privilege.**

The Board has implemented technology protection measures which block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board also monitors online activity of staff members in an effort to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. () The Superintendent or _____ may disable the technology protection measure to enable access for bona fide research or other lawful purposes.

Staff members accessing the Internet through the Board's computers/network assume personal responsibility and liability, both civil and criminal, for unauthorized or inappropriate use of the Internet. The Board reserves the right to monitor, review and inspect any directories, files and/or messages residing on or sent using the Board's computers/networks. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.

() To the extent that proprietary rights in the design of a web site hosted on the Board's servers would vest in a staff member upon creation, the staff member agrees to license the use of the web site by the Board without further compensation.

Please complete the following information:

Staff Member's Full Name (please print): _____

School: _____

I have read and agree to abide by the Staff Network and Internet Acceptable Use and Safety Policy and Guidelines. I understand that any violation of the terms and conditions set forth in the Policy is inappropriate and may constitute a criminal offense. As a user of the Board's computers/network and the Internet, I agree to communicate over the Internet and the Network in an appropriate manner, honoring all relevant laws, restrictions and guidelines.

Staff Member's Signature: _____ Date: _____

The Superintendent is responsible for determining what is unauthorized or inappropriate use. The Superintendent may deny, revoke or suspend access to the Network/Internet to individuals who violate the Board's Staff Network and Internet Acceptable Use and Safety Policy and related Guidelines and take such other disciplinary action as is appropriate pursuant to the applicable collective bargaining agreement and/or Board Policy.

APPENDIX F: US NATIONAL TECHNOLOGY PLAN

<http://www.ed.gov/technology/netp-2010>

APPENDIX G: REFERENCES:

1. Thomas A. Glennan and Arthur Melmed, *Fostering the Use of Educational Technology: Elements of a National Strategy*, (Washington DC; RAND Corporation, 1996) 36-44.
2. Barbara Means and Kerry Olson, *Restructuring Schools with Technology: Challenges and Strategies* (Menlo Park, CA: SRI International, November 1995).
3. Apple Computer, Inc., *Teaching in a Digital World: Connecting and Empowering the Whole Child* (2011, February 10). *The Whole Child Podcast*. [Audio podcast]. Retrieved from <http://itunes.apple.com/us/podcast/whole-child-podcast-changing/id306347401>.
4. National Information Infrastructure Advisory Council (January 1996)
5. Hasselbring, et al, *An Evaluation of Specific Videodisc Courseware on Student Learning in a Rural School Environment* (Knoxville, TN: Tennessee Valley Authority, 1991) 29-30.
6. Dwyer (1994) 4-10; Sheingold and Hadley, *Accomplished Teachers: Integrating Computers into Classroom Practice* (New York: Bank Street College of Education, Center for Technology in Education, 1990) 9; Herman, *The Faces of Meaning: What Do Teachers, Students and Administrators Think is Happening in ACOT* (Los Angeles, CA: UCLA Center for the Study of Evaluation, 1988); *Interactive Educational Systems Design* (1995) 7-8.
7. Margaret Riel, AT&T Learning Circle (Albuquerque, NM: Presentation at Symposium in Technology & Social Interaction, International Conference, Technology and Media, Division of the Council for Exceptional Children, 1992).
8. Margaret Riel, "The Impact of Computers in Classrooms," *Journal of Research on Computing in Education*, 222 (1989) 180-189.
9. Zorfass, *Evaluation of the Integration of Technology for Instructing Handicapped Children (Middle School Level): Final Report of Phase II* (Newton, MA: Education Development Center, 1991) 91-102; Ringstaff, Sandholtz, and Dwyer, *Trading Places: When Teachers Utilize Student Expertise in Technology-Intensive Classrooms*, (Cupertino, CA; Apple Computer, Inc., 1991) 11-12.
10. Zorfass, Corley, and Remz, "Helping Students with Disabilities Become Writers," *Educational Leadership* 51, 7 (1994) 62-66.
11. Zorfass, et al (1994) 62-66; Middleton and Means (1991).
12. Sheingold and Frederiksen, "Using Technology to Support Innovative Assessment, in Means," Ed., *Technology and Education Reform: The Reality Behind the Promise* (San Francisco, CA: Jossey-Bass, 1994) 91-108.
13. Johnson, L., Levine, A., & Smith, R. (2009). *The 2009 Horizon Report*. Austin, Texas: The New Media Consortium.
14. Martha Vockley, iste (2009), *Maximizing the Impact: The pivotal role of technology in a 21st century education system*
15. Education Week's Quality Counts 2012, http://www.edweek.org/media/qualitycounts2012_release.pdf

Shiawassee Regional Educational Service District Strategic Technology Plan

Vision: To provide highly effective and innovative services, resources, and support to the learning community that enhances student development and achievement.

Theme 1: Enable and Develop Data-Driven Decision-Making

- A. Utilize surveys in WebHelpDesk for feedback mechanism by June 30, 2015.
- B. Increase the number of trained users in Illuminate at classroom level by June 30, 2015.
- C. Increase administrative expectations and level of data usage at the building and district level based on end-user logins by June 30, 2015.
- D. Increase the utilization, accountability, and expectations of data usage based on end-user logins by applicable RESD staff by June 30, 2015.
- E. Identify datasets available and communicate the advantages of each including Illuminate, PowerSchool, and MISchoolData by June 30, 2015.

Theme 2: Enhance the IT Infrastructure

- A. Identify and participate in Best Practice Field Trips by June 30, 2016.
- B. Identify Server and Storage Resource Needs by June 30, 2015.
- C. Generate and maintain a Device Lifecycle Plan by June 30, 2015.

Theme 3: Foster Collaboration of Resources

- A. Establish a Technology and Instruction Showcase by June 30, 2016.
- B. Leverage collective purchase power and training opportunities. (Ongoing)
- C. Identify opportunities for de-duplication of efforts by June 30, 2016.
- D. Increase cross-training for uninterrupted service by June 30, 2016.
- E. Establish User Groups focused on initiatives or roles by June 30, 2016.
- F. Seek out best practices from conferences, user groups, and district visits to develop a method for sharing of knowledge with stakeholders by June 30, 2015.
- G. Identify innovative solutions and share potential collaborations with all potential stakeholders. (Ongoing)

Theme 4: Cultivate a Lifelong Learning Culture

- A. Develop a common benchmark of technology knowledge for all users in the organization by June 30, 2016.
- B. Utilize Opening Day to offer technology-focused professional development by June 30, 2015.
- C. Identify individualized learning resources by June 30, 2016.
- D. Identify and develop internal training resources and product champions by June 30, 2015.

Theme 5: Optimize IT Resources through Continuous Improvement

- A. Create a Service Catalog by June 30, 2015.
- B. Identify ways to improve data input and validation process for all datasets including Illuminate, PowerSchool, and MISchoolData by June 30, 2015.
- C. Establish a monthly event that exposes staff to new technologies, strategies, and best practices by June 30, 2015.
- D. Identify and develop improved onboarding and offboarding process by June 30, 2016.