3 Year Comprehensive Technology Plan

July, 2014 - June, 2017

Maine School Administrative District #46
175 Fern Road Suite 1
Dexter, Maine 04930
(207) 924-6000
1. Community and Parental Involvement

The district’s first technology plan was developed during the 1996-97 school year with broad-based community input. Members of the original committee included a town librarian, a private technology consultant, the chairperson of the library board, members of the business community, teachers, school administrators, community members at large, and a community development coordinator.

The following document is a revision and expansion of the district technology plan. In the 2011-13 school years the Technology Committee continued to meet to further explore the district’s current status and needs relative to technology and to further develop the plan for the future. The committee continued to have broad-based membership from various community groups. The members included parents, MSAD #46 instructional staff and administrators, local community members, local business people, an adult literacy service representative, and a member of the school board:

Kevin Jordan  SAD # 46 Superintendent
Matt Drewette-Card  Curriculum Coordinator
Susan Abel  SAD #46 Librarian
Lisa Flemke  SAD #46 Library Ed Tech
Paula McHugh  Principal, Ridge View Community School
Stephen Bell  Principal, Dexter Regional High School
Patrick O’Neill  Directory, Tri-County Technical Center
Patty Faley  Technology Educator, Ridge View Community School
Paul Shaw  Technology Coordinator, Dexter Reg.H.S.
Gary Smith  Math Teacher, Dexter Reg. H.S.
Jennifer McKenzie  Computer Repair Teacher, Tri-County Technical Center
David Fournier  Technology Coordinator, MSAD # 46
Rick Bilodeau  Member, MSAD # 46 Board of Directors
Dr. Gerrard Rudmin  Member, MSAD # 46 Board of Directors

Collaboration with adult literacy services is being accomplished through involvement of the Piscataquis Valley Adult Education Cooperative.
The technology will be used effectively to promote community and parental involvement and increase communication with parents by:

- Continuous updating of the MSAD #46 web site with information about the schools, personnel, and educational activities.
- Displaying student work done on computer during open house.
- Creating presentations using technology for public viewing.

MSAD #46 will inform parents about the technology and its proper use by:

- Distributing its acceptable use policy to each student at the opening of school to be taken home and shared with parents and returned signed before access to the Internet and an e-mail account is allowed.
- Providing information on internet safety to parents through the district web site.
- Continuing the use of Edline for parent communication.
- Providing technology awareness for parents through Ridge View Community School and Dexter Regional High School's Parent Laptop meetings.

2. Vision

MSAD #46 has incorporated the importance of technology into its overall vision statement:

*The community is the heart of the MSAD #46 system . . . and the MSAD #46 schools are the heart of the community. MSAD #46 supports lifelong learning, a respectful and safe environment, and technology to facilitate learning necessary for the 21st Century.*

The key statement related to technology, "*and technology to facilitate learning necessary for the 21st Century*" summarizes the community's position on technology in today's world.

We feel that students today need to master certain essential elements in order to be competitive in today's society:

- Being familiar with proper research methods (utilizing the Internet and on-line library catalogs as part of their research method)
- Know the proper application of technology as a tool to solve problems
- Knowing how to use word processor, presentation, spreadsheet software, database software, and other applications as tools to solve problems
- Have proper keyboarding skills

In order to learn these essential elements, students need the proper tools. The Technology Plan presented here summarizes what we feel are the tools needed for preparing students for the 21st century.
3. Goals

1. All educators in MSAD #46 will have the training and support they need to help all students learn using technology and the Internet.

MLR: Guiding Principles A.4, B.1, B.2, B.3, C.2, C.5, C.6, E.1, E.2

2. All educators, administrative support staff, and students in MSAD #46 have modern computers and technology maintained in their classrooms/offices. Every classroom will be networked within the district and connected to the Internet, integrating technology with curriculum and teaching strategies. All classrooms will have projectors and document cameras for delivering content to students.

MLR: Guiding Principles A.4, B.1, B.2, B.3, C.2, C.5, C.6, E.1, E.2

3. Effective and engaging software and on-line learning resources will be an integral part of each MSAD #46 curriculum.

MLR: Guiding Principles A.4, B.1, B.2, B.3, B.4, B.5, C.2, C.5, C.6, E.1, E.2

4. Stakeholders in our community will provide ongoing support of our technology plan.

MLR: Guiding Principles D.1, D.5, D.6

4. Identify Necessary Technology

**Hardware Assessment**

See Exhibit #1 for hardware inventories. Inventories are organized by buildings. The inventories show adequate technology at the schools serving students in grades PreK-12.

There are seven Tandberg video conferencing systems in use in the district schools. These systems provide access to teachers and students to virtual field trips to museums and zoos, allow classrooms in SAD #46 to connect with classrooms around the state and country, and allow staff to engage in professional development remotely and to collaborate with other teachers.

The fourth generation MLTI Macbooks were received in the 7th and 8th grades during the 2013-2014 school year and the district opted to purchase the third generation Macbooks. The third generation Macbooks were also purchased for the Dexter Regional High School and those Macbooks are being used for the one-to-one program. A lack of funding prohibited MSAD #46 from buying into the 2013-14 MLTI program, but hopefully funding
will be sufficient to buy into the program in subsequent years.

Continued Board of Director's budget support has continued to allow for the modernization of technology at MSAD # 46. Older computers have been stripped of usable parts and are used by the students in the Tri-County Technical Center Computer repair program to repair non-warranty computers. This is a significant cost savings to the district and gives the students real-world application of the skills they are learning.

The technology committee approved the purchase of Apple iPads for every teacher in MSAD #46 in the 2013-14 school year. This decision was made in order to encourage the use of mobile devices in the classroom. Two iPads were also purchased for each classroom K-4 for use by students as centers and for Title programs.

**Software Assessment**

District-purchased computers are operating on Windows 98/2000/XP/7 software and Apple OS-X software. Additionally, the MLTI laptops are using Apple OS-X. Open Office, Neo-Office, iWorks, or Microsoft Office Professional is installed on all district computers (using word processing, spreadsheet, and presentation, software) and is utilized by staff and students.

District file servers are using Windows 2003 and 2008 Servers. District E-mail is being provided for using the Google Mail system. Browsers are Chrome, Internet Explorer, Safari and Mozilla Firefox.

All principal's offices use the Rediker Administrator's Plus program for attendance, grades, scheduling, and discipline as appropriate at the various schools. All schools also use the GradeQuickWeb and Edline programs which interface with Administrator's Plus for entering grades electronically. The libraries use the Destiny system for management of the collections.

All district computers have anti-virus protection through the Sophos Anti-virus program. All computers in grades K-12 in the district have Internet filtering.

Each school has various programs and CDs specifically applicable to various content areas and grade levels.

The MLTI Apple iBooks are running Apple OS X for an operating system, and will be using the Apple suite of programs installed on the iBook (Pages, Numbers, Keynote, iMovie, etc.).
Several district-level systems are now in place at MSAD #46 to increase the efficiency of daily operations. The school nutrition program is now computerized and uses six touch screen point of sale systems using thumb scanners to process student lunches. Two databases are used to track sales and the free and reduced lunch program. The school nurse now has computer-based data base that integrates with the Administrator's Plus program (for demographic data) for tracking of allergies, shots, and other student related health activities or concerns. There is now a district level asset tracking system in place that utilizes the Destiny library catalog system. Special services has consolidated the IEP's into a district wide folder allowing easy access by special service staff. The district is utilizing the Maine DOE provided VFA Facility system to track the long term health and maintenance of the MSAD #46 facilities. The Alert Now system is being used at all schools. This program allows the dissemination of phone and or emails to groups of parents quickly in the event of an emergency (such as a snow day) or when needing to update parents of upcoming events (such as a teacher workshop day). The Rubicon Atlas curriculum site is now used to house the creation and management of the curriculum. The Atlas site is a web site that teachers can log into to do work. The curriculum is also available to the public through the district website.

Facility and Network Assessment

During the past 14 years, MSAD #46 has continued to explore technology and the ways in which it can strengthen the curriculum. As a result of several technology grants, local dollars (budget and special funds), and a new school project, there has been a considerable growth in the district’s technology.

All of the existing district's schools have been retrofitted to accommodate local area networks and computer labs and Ridge View Community School was built from the ground up with networking in mind. All classrooms have been provided with at least two connections to the LAN. All networks have been built using Category 5/6 cables and use a Cisco based wireless network.

Schools are connected to the Internet through the following methods (see exhibit #2):

- **DSL** - Bus Garage, Dexter.
- **200Mbs Fiber-optic line**: There is one fiber optic line contracted with NetworkMaine through the Maine School Library Network. This connection is shared by all MSAD #46 schools via the dark fiber installed by MSAD #46 (connecting DRHS and TCTC) and the Town of Dexter (connecting DRHS and RVCS).

The use of the WAN currently provides these services:

- Efficiency in managing network (remote access to servers)
● Students are entered into the Windows network at grade 5 and are transferred up through grade 12 as they move from school to school.
● Student portfolios are transferred from server to server as students matriculate up.
● Efficiency in using server resources.
● Server backups are made over the WAN from one building to another in case of a catastrophic loss.
● Network services have redundancy as all servers are available on the WAN.
● Administrators have real-time access to the accounting system so they can check on their budget.
● Administrators and Secretaries input requisitions into accounting system via remote access.
● Movement of computers throughout district is more efficient as the settings for the network do not change.

Internet service is provided to the schools through the Maine School Library Network.

Ridge View Community School has two computer labs with 25 networked macbook laptops in one and 25 Windows 7 workstations in the other.

Libraries at Dexter Regional High School and the Ridge View Community School are automated for cataloging, book checkout, and inventory. Library access is also available to the school and town over the Internet via a Destiny server, as is access to the Gale online articles and Marvel site (Maine's virtual library).

The high school library recently committed to purchasing over 4 years the MLTI sponsored Gale Virtual Reference Library including 278 reference titles in 900 volumes. The ebooks are integrated into the Destiny automated library system and can be accessed in the classroom and at home. The purchase updates the high school's reference collection.

Each location in the district has multiple telephone lines for use in making calls and sending and receiving facsimile transmissions. The schools and administrative offices use a PRI and Centrex system to manage the multiple phone lines that are needed, allowing an efficient sharing of phone lines between schools. All of the schools also have voice mail systems, which are used in making contact with parents and in leaving homework assignments for students via a Homework Hotline. These phone and voice mail systems at DRHS and TCTC are analog-based, and are currently at full capacity and expensive to maintain. Ridge View Community School now has a Voice over IP phone system in place as a result of the new construction. For the 2013-14 school year the district is looking at adding a Voice over IP system at DRHS and TCTC using E-Rate funding.
The Ridge View Community School now also has networked-based control over the building heating and ventilation system, lights, and door access controls.

**Equity of Access**

At this time, there is equity among all of the teachers in the District. Every teacher has an Apple OS-X laptop and iPad.

Students at all schools have equitable access to technology. All computers have a minimum 1.2Ghz CPU, all have Internet and network connectivity, and all have word processing, spreadsheet, and presentation software on them.

The student to computer ratio varies from school to school. The ratios of computers to students are as follows:

Disabled students have access to technology comparable to other students in the school and also utilize mobile devices such as the iPod Touch and iPad to access program specific applications that may be called for in an IEP. Special education classes are equipped with computers and mobile devices. Disabled students use the technology resources available in each school. Assistive technology devices have been provided to the students needing them (examples are oversized keyboards, touch screen monitors, speech recognition software, with plans for Kurzweil readers which can scan pages and read them to students).

The community has access to the technology through the adult education program. A number of courses for varying skill levels are offered each semester. Informal access is provided via five computers set up at the Town Hall in Dexter.

**Maintenance**

Dexter Regional High School employs a full-time building technology coordinator whose duties include network maintenance, initial troubleshooting of computer problems, and maintenance of the MLTI program at the high school level.

The Ridge View Community School has a full-time technology educator who fulfills a similar function when she is not teaching and also employs a full-time educational technologist who has primary responsibility for PreK-4 classrooms and classroom technology K-8.

Tri-county Technical Center uses the Computer Repair teacher as a part-time technology coordinator (through a stipended position) whose duties include network maintenance and troubleshooting of computer problems.
MSAD #46 employs a full-time Technology coordinator who is responsible for maintenance of technology of the Ridge View Community School. The Technology Coordinator also oversees the maintenance and troubleshooting activities of the entire district.

Tri-County Technical Center also provides computer maintenance through the Computer Repair Class. Students provide the initial troubleshooting of computer problems and provide resolutions.

**Coordination**

The District Technology Coordinator is responsible for coordination of all district technology activities.

**Financial Resources**

Funds for technology have been realized from several sources. The district has used grants (Title IID Ed Tech Competitive), Title IID, local budgets, local donations, and has applied for E-Rate funds since 1999. Our E-Rate discounts range from 50-80%. The district as a whole received a 83% discount for Year 2013 (the E-Rate discounts are dependent on the National School Lunch Program enrollment figures as of October).

In the 2013-2014 budget year, there is approximately $147,000 committed to hardware, software, and salaries to support technology.

5. **Collaboration with Adult Literacy Service Providers**

At the current time, all formal adult education is provided by the Piscataquis Valley Adult Education Cooperative office. MSAD #46 supports their programming through the budget process and articulation agreements.

6. **Strategies for Improving Academic Achievement and Teacher Effectiveness**

MSAD #46’s funds, specifically Educational Technology funds, will be used to improve academic achievement, including the technology literacy of all students by providing:

- Access to up-to-date hardware and software in order to support student work.
- Providing the support staff to maintain the hardware and software.
- A range of technologies that support a variety of learning styles and multiple intelligences.
- Assistive technologies as needed.
- Student access to a wide range of information resources such as Gale, online
encyclopedias, etc.

- A Library/Media program that supports the development of student information literacy skills that use technology.

Our funds will improve the capacity of all teachers to integrate technology effectively into curricula and instruction by:

- Providing access to up-to-date hardware and software and training in their use.
- Providing the support staff to maintain the hardware and software.
- Providing continuing teacher training on the District's student information system and NWEA's. The data to be tracked range from basic demographics to student achievement in various academic areas, including Maine Learning Results' proficiencies.
- Purchasing hardware and software to support the goals and objectives of the plan.

7. Integration of Technology to Support Implementation of the Learning Results for All Students.

District staff are using technology to access on-line resources and to communicate with other professionals as the district’s Comprehensive Assessment System is developed. Technology is used to manage the work surrounding the Learning Results.

SAD #46 students are being required to use technology to demonstrate their learning in a number of subjects. In all schools, students use technology for various instructional tasks that are connected to the Learning Results.

Eighth Grade students are tested for proficiency in basic computer areas (such as keyboarding, component recognition, etc.) to meet the High School Computer Literacy Requirement for graduation.

The district has made considerable progress in its provision of hardware and software resources. The majority of all PreK-12 classrooms now have a digital projector, document camera, and interactive white board to give teachers new ways of presenting material to students and sharing student work for peer critiquing. The projector can also be used to display information on a computer or laptop either by the teacher or student, and can also be used to show instructional content on DVD or VCR.

Meanwhile, the thorough integration of technology into the district's Learning Results, its instructional practices and expectations is an on-going goal.
8. Technology Type and Costs, and Coordination with Funding Resources

The Technology Committee analyzed the available information and formulated the following action plan and goals to address the identified needs.

**Goal #1: To continue modernization of Technology in MSAD # 46**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Action Steps</th>
<th>Completion Date</th>
<th>Cost</th>
<th>Financial Resources</th>
<th>Progress Toward Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Continue yearly lease/purchase of technology.</td>
<td>On Going</td>
<td>Staff time $100,000 yearly</td>
<td>-Local funds 3Yr.Lease Purchase</td>
<td>Technology Plan, Appropriate moneys included in yearly budget.</td>
</tr>
<tr>
<td>2</td>
<td>Continue to maintain/update technology infrastructure</td>
<td>Summers</td>
<td>$55,000 per year</td>
<td>-Local funds 3Yr.Lease Purchase</td>
<td>Technology Plan, Appropriate moneys included in yearly budget.</td>
</tr>
<tr>
<td>3</td>
<td>Continue to upgrade classrooms with needed audio/visual technologies</td>
<td>On Going</td>
<td>$2500 per room</td>
<td>-Local funds</td>
<td>Appropriate moneys included in yearly budget.</td>
</tr>
<tr>
<td>4</td>
<td>Utilize the Maine Learning Technology Initiative (MLTI) program for the 7th and 8th grade and high school students</td>
<td>On Going</td>
<td>$94,000</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Continue move from Centrex-based analog phone/voice mail system to Digital IP-based system integrating phone, voice mail, and email services</td>
<td>On Going</td>
<td>$18,000</td>
<td>-Local funds</td>
<td>Technology Plan, Appropriate moneys included in yearly budget.</td>
</tr>
</tbody>
</table>
Goal #2: To maintain adequate technology staffing to support users and maintain the technology infrastructure.

<table>
<thead>
<tr>
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<th>Financial Resources</th>
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</thead>
<tbody>
<tr>
<td>1. Maintain current staffing: District Technology Coordinator; DRHS Technology Coordinator, TCTC Technology Coordinator (supports TCTC users), and RVCS Technology Coordinator.</td>
<td>● Budget for.</td>
<td>On-Going</td>
<td>As dictated by salary agreements and contracts</td>
<td>Local budget</td>
<td>Appropriate moneys included in yearly budget.</td>
</tr>
</tbody>
</table>
Goal #3: To ensure staff are trained to use available technology to maximum potential to support and enhance the curriculum.

<table>
<thead>
<tr>
<th></th>
<th>Objectives</th>
<th>Action Steps</th>
</tr>
</thead>
</table>
| 1. | Provide more systematic Staff Development during release time for technology integration | ● Assess training needs of all staff - staff survey  
● Write a plan to provide training programs during release time based on the needs assessment  
● Offer training on an ongoing basis  
● Evaluate degree of integration into curriculum |
|   |                                                                             | Completion Date On going  
|   |                                                                             | Cost $10,000 annually  
|   |                                                                             | Financial Resources -Title II  
-Adult Ed.  
-Master Contract  
-Existing Staff  
|   |                                                                             | Progress Toward Objective Workshop days scheduled. Money committed. |
| 2  | Train teachers involved in the MLTI Laptop program to incorporate the use of the laptops in the curriculum. | ● Assess training needs of staff  
● Offer training on an ongoing basis  
● Evaluate degree of integration into curriculum |
|   |                                                                             | Completion Date On going  
|   |                                                                             | Cost $2-3,000  
|   |                                                                             | Financial Resources -local funds  
|   |                                                                             | Progress Toward Objective Workshop days scheduled. Money committed. |
| 3  | Evaluate and draw conclusions on the effectiveness of technology integration efforts K-12 | ● Create district Data Team to evaluate the use of data to measure student growth |
|   |                                                                             | Completion Date On-Going  
|   |                                                                             | Cost $0  
|   |                                                                             | Financial Resources -Local funds, grants  
|   |                                                                             | Progress Toward Objective Minutes from Data Team |
Goal #4: To use Technology to enhance relationship between educational community, business community, and community at large.

<table>
<thead>
<tr>
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<th>Completion Date</th>
<th>Cost</th>
<th>Financial Resources</th>
<th>Progress Toward Objective</th>
</tr>
</thead>
</table>
| 1. | Continue working with Adult Education to provide evening classes.          | ● Survey the needs  
    ● Offer pertinent courses                                                  | On-going         | $0   | -                  | Surveys done.            |
| 2. | Support use of existing technologies for providing new training opportunities.| ● Survey needs of community  
    ● Explore possibility of staffing for supervision purposes               | Ongoing          | None | -Local budget -Adult Educ. | Adult Ed classes offered, computer club, ad hoc meetings |
| 3. | Educate community about existing communication methods and potential problems (cyberbullying, stalking, etc.) | ● Put information on District web site  
    ● Send info home with students                                               | On-going         | $0   | -                  | Information posted       |
|    |                                                                            |                                                                              |                 |      | Forms posted.        | Flyers sent home         |
| 4. | Educate community on Technology Programs offered, and show success stories. Continue to survey community businesses to learn what other technology programs should be offered. | ● Survey the needs  
    ● Offer pertinent courses  
| 5. | Continue using Centrex system (for managing multiple phone lines) and voice mail system, facilitating contact between community and teachers | ● Continue to budget for phone services                                       | On Going        | Covered in Goal 1 | -Local funds | Technology Plan, Appropriate moneys included in yearly budget. |
| 6. | Provide commonly used forms and other content on district web site.        | ● Gather relevant documents and post                                         | On Going        | $0   | N/A                 | Forms posted.            |
Goal #5: To utilize technology to support and enhance the curriculum.

<table>
<thead>
<tr>
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<th>Cost</th>
<th>Financial Resources</th>
<th>Progress Toward Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Support staff members who provide direct instruction and also support teachers as they increase the use of technology in the classroom.</td>
<td>● Budget for</td>
<td>On Going</td>
<td>Will vary</td>
<td>-Local budget</td>
<td>Appropriate moneys included in yearly budget.</td>
</tr>
<tr>
<td>2. Ensure technology is integrated into each content area where appropriate</td>
<td>● Hire curriculum coordinator to oversee integration of technology into the curriculum</td>
<td>On Going</td>
<td>$50,000/ year for salary and benefits</td>
<td>-Local Budget</td>
<td>technology integrated into curriculum</td>
</tr>
</tbody>
</table>
| 3. Provide more in-depth Staff Development during release time for technology integration | ● Assess training needs of all staff  
   ● Write a plan to provide training programs during release time based on the needs assessment  
   ● Offer training on an ongoing basis  
   ● Evaluate degree of integration into curriculum | On going   | $10,000 annually     | -Title II  
   -Adult Ed.  
   -Master Contract  
   -Existing Staff | Workshop days scheduled.  
   Money committed.                                                      |
| 4. Acquire the software and peripherals needed for each discipline to effectively use technology in the classroom. | ● Conduct a needs assessment for each discipline  
   ● Develop a list of overlapping materials that could be shared by others in the same discipline and in other areas.  
   ● Design labs or other systems to facilitate the sharing.  
   ● Prioritize the purchases of software and peripherals  
   ● Train teachers and students to use software and peripherals | On going   | $50,000               | -Title VI  
   -Local budget  
   -TLCF Grant  
   -E-Rate Refunds | Items purchased this year included TV monitors w/scan converters, digital webcams, VCR’s.  
   Continue needs assessment.                                          |
| 5. Utilize web-based curriculum tracking                                   | ● Contract                                                                    | On-Going   | $3000                 | Local budget                 | Curriculum maps and diary                                                                  |
| program for tracking curriculum and enabling efficient incorporation of technology into the curriculum | with Rubicon Atlas web site to manage curriculum | mapping |
9. **Supporting Resources**

MSAD #46 supporting resources (services, software, print resources, and other electronically delivered learning materials) that will be acquired to ensure successful and effective uses of technology are:

- A technology staff including district technology coordinator, three building technology coordinators and a computer repair teacher.
- Media Specialists.
- MLTI Lead Teachers.
- Internet access (minimum 200Mbps connection at the high school).
- Software that supports curriculum goals.
- Books and professional journals.
- Professional memberships (Maine ASCD and ACTEM).
- Conferences, workshops, and training opportunities.
- Internal E-mail/conference/messaging system.

10. **Steps to Increase Accessibility**

All students and teachers will have increased access to technology by:

- Providing both regularly scheduled and open computer lab times.
- Maintaining and upgrading the wireless infrastructure to allow for expanded use of technology.
- Implementing more mobile labs.
- Maintaining each classroom with at least one computer.
- Maintaining Internet and e-mail access to all computers.
- Provide printing capabilities from all computers.
- Exploring other handheld computing solutions.
- Maintaining hardware and software that is reliable.
- Providing opportunity to use laptops at home.

Educational Technology funds will be used to help students by:

- Providing funding for and training on how to use the program FileMaker Pro. The data to be tracked ranges from basic demographics to student achievement in various academic areas, with plans to fully expand into a Maine Learning Results proficiency tracking system.

We will ensure that teachers are prepared to integrate technology effectively into curricula and instruction by:

- Providing professional development through a variety of delivery methods including staff meetings, workshop days and early release days.
- Using the Rubicon Atlas Curriculum Web system to actively store and track usage of technology in the curriculum.
• Finding and using existing Internet curriculum resources.

11. Promotion of Various Curricula and Teaching Strategies that Integrate Technology

Various curricula and teaching strategies that integrate technology effectively into the general curriculum and instruction will be identified based on a review of relevant research, and promoted to lead to improvements in student academic achievement by:
• Continuing the alignment of the MSLR with curriculum and teaching strategies that integrate technology
• Continuing the integration of technology components into our curricular areas
• Continuing the membership of technology team members on other curricular teams
• Sharing research findings through the technology team with instructional staff

Technology components will continue to be added to the Comprehensive Assessment System by being embedded in each subject area as it is added to the Comprehensive Assessment System.

12. Professional Development

Ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel will be provided to further the effective use of technology in the classroom and library media center:

• Staff surveys will identify the topics that will be offered by the district. Technology instruction will be offered during teacher workshop days and in after-school sessions.

• Teachers are encouraged to take graduate level college courses in integrating technology into the curriculum.

• All professional development is designed in cooperation with other curriculum committees and keeping the district needs in focus.

• Moving towards a “flipped” model of professional development where the introduction of new ideas is presented in a video prior to the training, freeing up time in the training for discussion. This is also to model flipped classroom instruction models.
13. Innovative Delivery Strategies

The development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning technologies, will be encouraged by:

• Visiting web sites chosen for a specific topic and completing activities that show evidence of learning.
• Using Media-Place workstations to take virtual field trips and host virtual field trips for other schools.
• Foreign Language course delivered over distance learning.
• All district media center collections that are now available via the web or network.
• Using the Moodle system to deliver content and give tests/quizzes.

14. Accountability Measures

MSAD #46 will evaluate the extent to which the plan activities are effective in integrating technology into curriculum and instruction by:

• Ensuring 8th grade students have mastered MSAD #46's computer literacy standards for high school graduation.
• Taking surveys to get feedback on the success of the District’s Technology Plan.
• Investigate implementing a record keeping system that could be used to measure how technology is being used with the curriculum.
• Meeting annually to go over the goals listed in the plan to gauge progress.
• Ensuring there is sufficient money in the budget to support technology.