

Lathrop R-II Schools

Technology Plan

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Introduction

The Lathrop R-II School District is located in the eastern half of Clinton County, in the northwestern section of Missouri. It comprises an area of 104 square miles in Clinton County and 9 square miles in Caldwell County. The District operates one high school, one middle school, and one elementary school: with a total enrollment of approximately 900 students. The Lathrop area is largely rural deriving most of its job income from the greater Kansas City area.

Our greatest resource is the people in our community who provide great support to the district in many ways. The small number of local businesses support the school as a part of the community. Since the district is located just north of Kansas City 3 miles off of I-35, the community has ready access to many cultural and educational resources.

In pursuit of its mission to educate, inspire and challenge all students to strive for excellence, the district supports a wide range of programs, including:

- Parents As Teachers
- Full-day Kindergarten
- Comprehensive Special Education services
- Gifted education classes
- AP and College-level dual classes for high school students offered on site.
- Computer assisted instruction with PLATO.
- Effective classroom instruction in all academic areas, the fine arts and physical education.

The Lathrop R-II School District has consistently received full accreditation, also earning “Distinction in performance” from the Missouri Department of Elementary and Secondary Education for the 2001-2002, 2002-2003, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years.

Overview of Technology Plan

The Lathrop R-II School District has selected Intel compatible hardware as its base platform. This selection was made because we believe this to be the platform students will most likely be working with when they enter the world of work.

We are currently in the process of upgrading computers to the most current operating system available at the time of lease or purchase. All new purchases will have the hardware necessary to run the current shipping version of the Windows operating system or better. Additionally the district has chosen Microsoft Office as its standard word processing, spreadsheet and presentation software so that learning may continue with as little interruption or need for re-training as possible.

Access is a critical aspect of any technology plan. Access has been facilitated through the use of six computer labs, four laptop labs, two net book labs and classroom computers connected to the district wide network and Internet. This has been a priority of our technology effort in the past. Some 7th and 8th grade students participate in a computer skills class teaching them valuable skills for the future. These classes are directed at ensuring that our 8th grade students are technologically literate as is expected by the “No Child Left Behind” Act.

Video usage is available to staff and students in the elementary, middle and high school library media centers. The media centers have a satellite antenna and receiver. These are primarily utilized to record programs that are used later for in-service presentations and classroom educational materials. Televisions, VCR’s and DVD players are available for classroom use. Most of these are on carts that can be rolled into the classroom if the classroom is not already supplied with such. Channel One is available to the middle school students. Teachers who desire the use of instructional video may do so by arranging with the librarian ahead of time. All three libraries have and maintain four or more computers for student research, product development, application use and usage of the district Winnebago Spectrum and Inforcentre Library Cataloging program.

Administrative support:

Each room has telephone access to the district as well as the world, along with at least one high-speed data connection. The district is using PRI circuits, which are a more cost effective way to receive telephone services, rather than purchasing individual lines one at a time. This allows teachers access to

parents immediately, as well as better access to the main office, other teachers, and school announcements with the simple use of a touch-tone phone. Because of the necessity of this form of communication for our faculty and staff, the district will procure the best solution to maintain our district telecommunication hardware. Additionally, because of an increase in district size and distance through expansion, the district will be looking at communication requirements for some district wide staff that will range from cellular to radio transmission.

Connectivity is another vital aspect necessary to support effective utilization of technology. Our district network currently is running on a 1 Gbps backbone and provides 10/100 Mbps connections to computers in the district. Our network consists of a mixture of category 5 cable and fiber optic cable. We have fiber optics running to each of the main buildings and the central district office, while Cat-V cables connect local computers to the local wiring closet.

The District is currently operating on a Microsoft Windows 2008 domain which was upgraded the summer of 2011 consisting of three domain servers and one Windows 2000 Server for student files. All machines using the district wide network currently use the TCP/IP Protocol to connect to the network and/or Internet.

Each building has a several HP Procurve switches, with a 1Gbps Module, connecting over fiber a 1 Gbps backbone. From these switches, data is moved via Cat-V, Cat-Ve, or Cat-VI cable to either other switches or directly to an area of need. The district maintains a Cisco Router, as well as a SonicWall Firewall/Internet Filter combination (which fulfills CIPA requirements) in addition to these switches. The Lathrop R-II School District will add or upgrade additional services including hardware and cabling to provide for the growth of technology and telephony to support changes or growth as is required by the district. The recent high school bond, district funds and E-rate will be used to lease a fiber run to connect the current collection of buildings from the Vo-Ag building to the new high school.

Support services:

Lathrop R-II School District has employed a halftime technology coordinator since the 1997-1998 school year. This has greatly reduced the amount of money spent on repairs and computer technical assistance from previous years. This position became full time as of the 2000-2001 school year.

Training:

The Lathrop R-II School District recognizes that training is an essential component in the utilization of existing and future technology. The district further recognizes that staff, students, and community members must receive appropriate instruction in technology to facilitate improved student achievement. In order for this to be accomplished, staff members and students must receive training that focuses on the district technology goals.

Previous training has included the usage of Windows, SIS, Microsoft Word, Excel, PowerPoint, Web Building, Portfolios, writing a cd/dvd and Developing Assessment Tools with Microsoft Word. In the evaluation process, we discovered that this was a great benefit for the majority of the staff who did attend. Additional training will be provided as it becomes available to staff members. It would seem appropriate that those already proficient at using the system will be able to advise fellow staff members who are learning to navigate the world of technology. The technology coordinator and other staff attend educational workshops and conferences on a yearly basis to maintain and upgrade their skills not only in computer/technology usage, but to learn to facilitate and use technology in our district curriculum. New surveys are being completed as well so that current district deficiencies in training may be addressed and training offered to local staff.

The wide-range of technology knowledge, from users with little to no experience to those who are more advanced, among our staff and students has caused the district to evaluate in-service needs provided through federal funds and professional development funds. This evaluation will be conducted annually to determine appropriate in-service needs for the coming year.

Technology Committee

The technology committee for the Lathrop R-II School District was selected by asking individuals if they would be committed to helping the students, staff and community by serving on this committee. Individuals were asked to serve who represented a wide array of populations within our school and community. The number of businesses in the community is small, however, these members often support the various school functions any way possible.

Due to the smaller size of our school district and closeness of the community working with the school, individuals of the committee often discuss issues and concerns about technology in informal settings.

The administration is always available to communicate concerns as well as relay positive happenings related to the technology field.

The technology committee will have access to information relating to all areas concerning technology. Policies and procedures will be examined yearly for any necessary updates. The committee will be informed of planned purchases, funding sources and availability as well as the long and short-term goals of the technology department.

The technology coordinator serves as the facilitator of the technology committee and oversees the technology plan's development and implementation. The Superintendent will also serve as a facilitator to explain and discuss funding issues, legal issues, building and district responsibilities and other related information. The staff members will have the input needed from the teacher's perspective and the students will provide this information from the student population. Community and business members will be available to advise the school on skills and expectations they would like to see in students graduating from our district. The technology plan is for the district to follow as its guide. The written plan will be given to all administrators, board of education members and available to anyone in the district who requests it. A copy will be on file in the library and posted on the district web page.

Members of the committee have used the plan on several occasions to bring concerns to the School Board as to our growth and change. Funding issues have negatively affected some of what we would have liked to have accomplished as a district technology committee. Most members of the committee serve as a sort of peer technology advisor to other local staff and aid with problems if they feel they are able to. This allows the members of the committee to stay up on current issues with teachers and their knowledge. All elementary teachers are required to spend time with their classes in the elementary lab and a para is available to assist them and their classes in its beneficial use.

TECHNOLOGY MISSION STATEMENT

The Lathrop R-II School District will incorporate appropriate, up-to-date, and well-maintained technology, staff training and a technology rich curriculum in order to provide for and improve student achievement.

CSIP MISSION STATEMENT

The Lathrop R-II School District is dedicated to educate, inspire and challenge all students to strive for excellence.

CSIP Goals

- Achieve “Distinction in Performance”
- Promote a focused, positive learning environment for staff students and community
- Continue to evaluate, revise and teach the curriculum
- Emphasize reading and writing achievement in all content areas
- Enhance open communication and address diversity throughout the school community

This plan conveys Lathrop R-II School District’s commitment to incorporate technology via CSIP and throughout our K-12 instructional goals as they are being revised.

Through our CSIP Actions steps we plan to:

- Provide adequate and timely technology support and maintenance.
- Provide staff in-service to effectively use available technologies.
- Provide all students instruction related to the safe and proper use of the Internet.
- Provide students with a variety of technological tools to enhance their success in school and/or in a chosen vocation.
- Make all students technologically proficient by the end of their eighth grade year in order to encourage life-long learners.
- Students and Staff will have access to information and technology systems, which permit efficient and effective communication locally and globally.

The Lathrop R-II School District believes that technology in education is justified in two ways. First, it is a means of making the educational process more efficient. This will include the utilization of technology and appropriate software tools to increase faculty and staff productivity. Second, it is a

means of improving student achievement and enabling students to utilize technology in their daily lives and eventually in the workplace. This will include the integration of software and appropriate tools into the daily curriculum. Technology should be included with all other aspects of the educational process. Students should be trained to use it in all aspects of their daily life.

Understandably, the hardware, infrastructure and training portions of the technology plan provide the foundation for the real use of technology. These items are imperative if technology is going to be integrated into the educational environment. Adequate computer hardware resources and technical support is necessary to utilize the productivity and instructional software as well as to access electronic sources of information. An adequate computer network is necessary to allow broad communication, sharing of data, and efficient distribution of software. An Internet connection is necessary to expand the reach of our network and to provide access to a tremendous store of information and resources.

Lathrop R-II School District feels that the benefits of integrating technology into our district and its curriculum will increase Student Learning, Teacher Preparation and Administration, Management and Communication as long as it is supported adequately by the required resources and technical support.

Lathrop R-II School District has made a commitment to provide the best education possible for all of its students. Society is impacted in a substantial way by a wide variety of technologies. We must, to the best of our ability, anticipate the future changes of our society and prepare our students to be productive citizens in that society. We are preparing them for a work and home environment that is technologically oriented and which will demand use of higher order thinking skills. Many occupations will require people who can solve problems, understand complex terminology, communicate clearly, make sense out of massive amounts of ever changing information and utilize technology.

The Lathrop R-II School District believes that students must be empowered with the tools necessary to learn “how to learn” in an information-based, technologically oriented society. Technology exists as a very powerful, essential tool in the educational process for students, staff, and community learners. With the expansion of the knowledge base, it is no longer possible for teachers to know or teach everything a student needs to know in order to succeed in life. In all areas of the curriculum, we must teach an information-based inquiry process. Educators must be visionary in their application of knowledge, technology, and educational methods. Learners must be able to function in a world in which

much of the technology and knowledge they will use has not even been discovered.

Lathrop R-II School District believes that technology used appropriately will provide learners the lifelong skills such as flexibility, creativity, adaptability, critical thinking, problem solving, and collaboration; which is essential to success in our rapidly changing information age.

TECHNOLOGY PLANNING RAW DATA

The district level technology committee is responsible for district-wide technology planning and implementation. Needs are determined by analyzing the following documents and information sources by all TFA committees.

Standardized Assessments

- MAP scores
- Stanford 9 scores
- Gates-MacGinitie
- PLAN
- ACT
- ASVAB

Local performance assessments

- District Reading Program information and appropriate assessments
- Local Quarterly Assessments (pre/post tests, scoring guides/rubrics, checklists, observations)
- Student Standard Requirements (Graduation Requirements, Attendance Requirements, Testing Requirements.)

Surveys and records

- District surveys of teachers, parents, students and administrators on technology
- Missouri Census of Technology (COT) (1998-2003)

Policies, procedures and other documentation

- Board Policy on Copy Right {EGAAA}.
- Board Policy on Instructional Library Media Centers {IIAC, IIAC-R}.
- Board Policy on Technology usage and Internet Filtering {EHB, EHB-R}.
- Staff and Student Acceptable Use Policy
- MSIP documentation
- CSIP documentation
- CIPA documentation
- Previous Technology Plan
- State Technology Plan
- Work order requests

Curriculum standards, including technology

- District Curriculum
- Show-Me Standard Requirements
- ISTE National Educational Technology Standards for Students

Technology budget

- District Budget
- District Technology Budget

Professional development data

- PDC Training data
- Training evaluation
- Performance Based Teacher Evaluation (PBTE)

Administrative networking tools

- LEMCO
- EMERS
- Budget Plus
- Spectrum and Infocentre CIRC/CAT

Data management tools

- E-mail and Internet statistics
- Student Information System (SIS) data including grades, attendance and more.

Communication tools

- Internet/Intranet
- E-mail system
- Locally supported digital phone system
- SIS E-mail

Total Cost of Ownership (TCO)

- Hardware Inventories
- Software inventories

Table: 2 – Raw Data

In the past, these needs have been addressed through such implementations as computer labs, classroom computers, wireless laptop labs, wireless net book labs, smart boards, classroom projection, document cameras, clicker systems, district filtering hardware, district firewalls, a district phone system placing a phone on every teachers and staff members desk and district wiring to bring the district network and the Internet to every classroom.

DISTRICT TECHNOLOGY GOALS

Technology will be valuable and effective only if it provides a means of accomplishing or supplementing the overall goal of education. We believe in the development of the total child and to this end we are dedicated to educate, inspire, encourage and challenge students to strive for excellence in their academic, social, and personal lives. Thus, the Lathrop R-II School District sees the need to:

Goal 1: (TFA 1) The Lathrop R-II School District will enable learners to use developmentally

appropriate technology to acquire, manipulate, and assess information in an effort to create technology literate 8th grade students for the world today and beyond.

- Goal 2: (TFA 2) The Lathrop R-II School District will provide on-going professional development to assist teachers in delivering effective, technology-supported instruction to improve student learning.
- Goal 3: (TFA 3) The Lathrop R-II School District will use technology to improve administration, data management and communication throughout the school system as well as to improve communication between the school system and the community.
- Goal 4: (TFA 4) The Lathrop R-II School District will provide adequate and equitable access to current instructional technology tools and resources for staff and students.
- Goal 5: (TFA 5) The Lathrop R-II School District will provide adequate and timely technology support and maintenance for the students, staff and administration.

The previous technology plans failed to have directed goals and needed for the goals to be refocused more on the Technology Focus Areas. We have revamped our goals to provide a more TFA focused goal. Since all goals tend to be long ranging in their focus, actual achievement of a goal will rarely ever be met. In measuring goals we look for progress that would tend to say that we have stayed the path for the goal.

DISTRICT TECHNOLOGY COMPETENCIES

Through their educational experience in the Lathrop R-II School District, all students should develop the following technology competencies that will be used as a basis for evaluation of our technology program and the determination of a technology literate student. Adopted from ISTE National Educational Technology Standards for Students (NETS*S) {http://cnets.iste.org/students/s_profiles.html}.

NETS for Students Profiles for Technology Literate Students

A major component of the NETS Project is the development of a general set of profiles describing technology-literate students at key developmental points in their pre-college education. These profiles reflect the underlying assumption that all students should have the opportunity to develop technology skills that support learning, personal productivity, decision making, and daily life. These profiles and associated standards provide a framework for preparing students to be lifelong learners who make informed decisions about the role of technology in their lives.

The Profiles for Technology Literate Students provide performance indicators describing the technology competence students should exhibit upon completion of the following grade ranges:

- Grades Pre-K through 2
- Grades 3 - 5
- Grades 6 - 8
- Grades 9 - 12

These profiles are indicators of achievement at certain stages in Pre-K through 12 education. They assume that technology skills are developed by coordinated activities that support learning throughout a student's education. These skills are to be introduced, reinforced, and finally mastered, and thus, integrated into an individual's personal learning and social framework. They represent essential, realistic, and attainable goals for lifelong learning and a productive citizenry. The standards and performance indicators are based on input and feedback from educational technology experts as well as parents, teachers, and curriculum experts. In addition, they reflect information collected from professional literature and local, state, and national documents.

GRADES PRE K - 2

Performance Indicators:

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 2 students will:

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

GRADES 3 - 5

Performance Indicators:

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 5 students will:

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

GRADES 6 - 8

Performance Indicators:

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 8 students will:

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (1)
2. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. (2)
3. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (2)
4. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (3, 5)
5. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (3, 6)

6. Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (4, 5, 6)
7. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (4, 5)
8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (5, 6)
9. Demonstrate an understanding of concepts underlying hardware, software, and connectivity and of practical applications to learning and problem solving. (1, 6)
10. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (2, 5, 6)

GRADES 9 - 12

Performance Indicators:

All students should have opportunities to demonstrate the following performances. Prior to completion of Grade 12 students will:

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

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

1. Basic operations and concepts
2. Social, ethical, and human issues
3. Technology productivity tools
4. Technology communications tools
5. Technology research tools
6. Technology problem-solving and decision-making tools

District Technology Focus Areas

TFA 1: Student Learning and Performance.

Review of Previous Technology Plan’s TFA 1 Activities:

Goal	Result	Status
Technology goals integrated into curriculum	Current curriculum currently undergoing revision	ongoing
Create continuity in reading programs K-12	K-8 has improved	ongoing
Current technology availability to teachers	We have increased the resources available to classroom teachers through open lab time and increased number of computers. Addition of 2 handheld mobile labs at the middle school. Smart boards have been added to open labs and some classrooms at the elementary and middle school levels. 4 Mobi-use systems, student response pads at the high school	ongoing

Student Learning * Data Analysis:

Table: 2 – Raw Data lists a comprehensive inventory of data analyzed. We used data pertaining to the Student Learning TFA to identify strengths and weakness of our current student learning environment. This data used included information from standardized assessment data, local performance assessment

data, policies procedures and other documentation, curriculum standards and district data management tools. This provided us direction in developing action plans and steps for the 2012-2015 Technology Plan.

Technology use is present in the classroom and being built into the curriculum. We have 137 working student computers for 445 students in the elementary building, 107 for 212 middle school students, and 183 for 244 high school students for a total of 427 working student computers for 900 students. Along with increasing our computers things like smart boards, PDA's and Elmo's have been added to teacher student use. Currently some 7th and 8th grade students receive instruction in computer class to prepare them for technology literacy by the end of the 8th grade year. Additional difficulties exist with different technology assessment tools being utilized at each level making it difficult to develop an overall picture of a student's reading development throughout his/her school career.

District strengths and weakness of student learning:

Strengths	Weaknesses
Usage of PowerPoint, Word, and Excel in instructional settings.	Lack of continuity in reading evaluation tools used in K-12. K-3 uses Dibels, 4th grade uses Gates and Star, 5th grade uses DRA, 6-8 use Star.
Use of reading evaluation tools and elementary and middle school plans to buy new Star Reading assessment for grades 4-8.	Due to the increase in the amount of technology equipment, the technology staff is unable to keep up with computer maintenance and repairs.
Resource Distribution: We have 2 labs available to students and teachers at every building along with at least 2 mobile labs.	Lack of written technology curriculum and updating of software instruction and curriculum to show how technology is integrated in classrooms.
Policies and procedures; Policies and procedures encourage student achievement.	Middle school students (grades 6-8) lack continuity in computer instruction.
3rd-5th grade weekly computer class	Mobile laptop batteries need to be replaced regularly.
Middle school students take pre/post technology assessment test	Lack of an upgrading schedule for MS Office and other basic computer programs; e.g. MS Office is 2003 version
All classrooms have integrated sound and projectors	Working student computers in district is 427 for 900 students.
Freshmen required to take Computer Applications I	
Media specialists are quick to respond to staff needs.	

Student Learning * Goal:

The Lathrop R-II School District will enable learners to use developmentally appropriate technology to

acquire, manipulate, and assess information in an effort to create technology literate 8th grade students for the world of today and beyond.

Student Learning * Objective(s):

Objective 1: Student achievement will increase through integration and implementation of technology into content areas of the curriculum at all levels, as measured by an increase in the top 2 levels of the MAP and EOC assessments.

Objective 2: Student achievement will increase through the use of district computer applications designed to advance their knowledge and test taking skills, as measured by an increase in the top 2 levels of the MAP assessment.

Objective 3: Student achievement will increase through professional development provided for staff in the area of technology application in regards to the individual content area curriculum, as measured by an increase in the top 2 levels of the MAP and EOC assessments.

Action Plans and Implementation of TFA 1, student learning:

The above mentioned objectives led to the following action plans that will generate steps to improve technical support in the district. MSIP and CSIP standards are linked to these action plans.

Student Learning * Action Plan Objective 1: Student achievement will increase through integration and implementation of technology into content areas of the curriculum at all levels, as measured by an increase in the top 3 levels of the MAP assessment.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
9.3	1.2	All Curriculum will be entered into an electronic alignment tool to provide for alignment with the proper standards in order to increase student performance	Superintendent, Board of Education, Administrators	District Budget	On-going
9.3	1.2	District staff will integrate technology into the curriculum at all levels to facilitate increased student learner outcomes.	Superintendent, Board of Education, Administrators	District Budget	On-going

Student Learning * Action Plan Objective 2: Objective 2: Student achievement will increase through the use of district computer applications designed to advance their knowledge and test taking skills, as measured by an increase in the top 2 levels of the MAP assessment.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
9.3	1.2	Students will have access at all levels to district applications designed to monitor and improve student achievement in all MAP areas, EOC, ACT, and reading	Superintendent, Administrators	District Budget	On-going; Reviewed yearly
9.3	1.2	Over the next 3 years, students at all tested levels will improve MAP, EOC, and ACT testing by 5%.	Superintendent, Administrators	District Budget	On-going; Reviewed yearly
9.3	1.2	Over the next 3 years, students at all tested levels will improve reading proficiency through electronic testing by 10%.	Superintendent, Administrators	District Budget	On-going; Reviewed yearly

Student Learning * Action Plan Objective 3: Student achievement will increase through professional development provided for staff in the area of technology application in regards to the individual content area curriculum, as measured by an increase in the top 2 levels of the MAP assessment and EOC testing.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
6.7	4.3	Provide Professional development opportunities within the school district in technology by content area through peer training.	Superintendent, Administrators, Technology Coordinator, PDC	\$0 : District Budget	yearly 2012-2015; Reviewed yearly
6.7	4.3	Provide Professional development opportunities in technology by content area through attendance at conferences, outside speaker, and other professional development resources.	Superintendent, Administrators, Technology Coordinator, PDC	\$3,000 : District Budget and Title II training funds	yearly 2012-2015; Reviewed yearly
6.7	4.1	Provide Technology Facilitator to: integrate professional development, curriculum, and software acquisition, assess staff needs, develop a technology plan and work in conjunction with the technology department.	Board of Education, Superintendent	District Budget	2012-2015

Student Learning * Evaluation:

Evaluation of each action step, objective and overall goal will be done according to the guidelines on page_.

TFA 2: Teacher preparation and delivery of instruction.

Review of Previous Technology Plan’s TFA 2 Activities:

Teacher preparation * Data Analysis:

Table: 2 – Raw Data lists a comprehensive inventory of data analyzed. We used appropriate data pertaining to the Teacher Preparation TFA to identify strengths and weakness of our current teacher preparation. The data used included information from surveys and records, student teacher and administrator standards and professional development data. This provided us direction in developing action plans and steps for the 2012-2015 Technology Plan.

Getting useful technology and training to our teachers is a pressing need for getting them comfortable and familiar with its use as it applies to their classrooms.

District strengths and weakness of teacher preparation and delivery of instruction:

Strengths	Weaknesses
Student learning: District has accepted the ISTE standards and is working on integrating them into the district curriculum in an attempt to create technology literate 8th graders	Teacher preparation and delivery of instruction: Teacher usage of technology needs to be encouraged district wide at all levels.
Resource Distribution: We have permanent and mobile labs available for students and teachers as well as many small or mini-labs in classrooms. The majority of classrooms in the district also have AV projectors and document cameras. Student interactive devices are also available at the HS and MS level	Policies and Procedures: Policies and procedures need to encourage teacher technology preparedness specifically in the area of instructional technology.
Technology support: Technology staff, media specialist and knowledgeable staff members are quick to respond and correct maintenance issues.	Technology Support: Lack of Professional Development opportunities in the area of instructional technology and training in existing technology.

Teacher preparation * Goal:

The Lathrop R-II School District will provide on going professional development to assist teachers in delivering effective, technology-supported instruction to improve student learning.

Teacher preparation * Objective(s):

Objective 1: Provide adequate training, preparation and encouragement to allow the staff to effectively

use available technologies as measured by an increase in the documented usage in the district curriculum maps and in the increase in PD opportunities provided.

Objective 2: Provide district policy that encourages teacher growth in the area of technology as is assessed by PDC teacher survey.

Objective 3: Provide additional technology staff to provide timely training and Professional Development to staff specifically in the area of technology usage for instructional purposes.

Action Plans and Implementation of TFA 2, Teacher preparation and delivery of instruction:

The above mentioned objectives led to the following action plans that will generate steps to improve technical support in the district. MSIP and CSIP standards are linked to these action plans.

Teacher preparation * Action Plan Objective 1: Provide adequate training, preparation and encouragement to allow the staff to effectively use available technologies as measured by an increase in the documented usage in the district curriculum maps and in the increase in PD opportunities provided.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
39	5.2.3, 5.1.2, 3.2.5, 4.6.3, 6.4.4, 6.7	District Staff will be surveyed yearly and training provided to fulfill areas that are in need.	Superintendent, Board of Education, Administrators	District Budget, PDC Budget	Ongoing: reviewed yearly

Teacher preparation * Action Plan Objective 2: Provide district policy that encourages teacher growth in the area of technology as is assessed by PDC teacher survey

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
10.1, 10.2, 23	6.4.1, 6.4.4, 8.8.2, 6.8	Review and update current board policies and PBTE to encourage the use of technology to help in teacher preparation.	Superintendent, Board of Education, Administrators.	0\$: District budget	ongoing: reviewed yearly

Teacher preparation * Action Plan Objective 3: Provide additional technology staff to provide timely training and Professional Development to staff specifically in the area of technology usage for instructional purposes.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
10, 39, 9.5	P6.4.4 6.7.6 6.7.2	Hire additional technology staff specifically to provide Professional Development for teachers in the area of instructional technology. Provide additional in-house PD opportunities by utilizing additional technology staff.	Superintendent Board of Education Administration	\$35,000-50,000 District budget	2012-2013 school year: review yearly

Teacher preparation * Evaluation:

Evaluation of each action step, objective and overall goal will be done according to the guidelines on page 30.

TFA 3: Administration/data management/communication

Review of Previous Technology Plan’s TFA 3 Activities:

The prior goal of providing a standardized data management system throughout the district was met. Our Student Information System is an excellent tool.

The prior goal of maintaining an up-to-date system for assessing student information by students, staff and community was met by our SIS system as well.

The prior goal of providing more efficient and economical means to communicate district, building and student information for all stakeholders was met at least in terms of amount and efficiency, if not economically. Through the use of SIS, SchoolReach, Textcaster, our web-site, Gradewatch, and google docs communications with and between all stakeholders has improved. In fact, overkill was sometimes mentioned. We do think we would rather have that problem than to have some people not being informed.

Identifying strengths and weaknesses.

We used appropriate data pertaining to the Administrative TFA to identify strengths and weakness of our current administrative programs. (Table 2.) The data used included information from the following sources: Staff, Student and Parent surveys, anecdotal accounts from users, and data returned from the tool itself. This provided us direction in developing action plans and steps for the 2012-2015 Technology Plan.

Overall, we are pleased with our current assortment of administrative tools. We do believe more training on each would increase their use and productivity.

District strengths and weakness of Administration/data management/communication:

Strength	Weakness
Variety and availability of communication and management tools.	Staff knowledge and skill in using the tools to their greatest potential.
Information is disseminated regularly and appropriately for those that choose to receive it.	If possible, sometimes there are too many messages on the same subject.
Tools are mostly Internet based and are regularly updated.	Building level administrators feel there is a need for teacher evaluation software.

Administration * Goal:

The Lathrop R-II School District will use technology to improve administration, data management and communication throughout the school system as well as to improve communication between the school system and the community.

Administration * Objective(s):

Objective 1: Provide training opportunities for administrative, data management and communication software.

Objective 2: Research and implement an on-line teacher evaluation tool to enable administrators to more efficiently evaluate teaching and learning.

Action Plans and Implementation of TFA 3, Administration/data management/communication:

The above mentioned objectives led to the following action plans that will generate steps to improve administration, data management and communication in the district. MSIP and CSIP standards are linked to these action plans.

Administration * Action Plan Objective 1: Provide training opportunities for administrative, data management and communication software.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
10.1	1.6.3,2,2	Survey staff for software training need.	PDC	None	May 2012
10.1	1.6.3,2,2	Provide required trainings to meet the needs of most of the staff.	PDC	District Funds	Ongoing
10.3	1.6.3,2,2	Employ an Instructional Technology Coach to work with staff on training and implementation of technology tools.	Board, Supt.	District Funds	2013 - 2014 School Year

Administration * Action Plan Objective 2: Research and implement an on-line teacher evaluation tool to enable administrators to more efficiently evaluate teaching and learning.

MSIP standard	CSIP strategy	Action Step/Activity	Person Responsible	Funding Source	Timeline / Completion Date
9.5	2.1, 2.3	Research available tools	Sup, Principals	District Funds	May 2012
9.5	2.1,2.3	Select most appropriate tool	Sup, Principals	District Funds	May 2012
10.1	2.1, 2.3	Provide training on implementation of the tool	Sup, Principals	District Funds	July 2012

Administration * Evaluation:

Evaluation of each action step, objective and overall goal will be done according to the guidelines on page 29.

TFA 4: Resource distribution and use.

Review of Previous Technology Plan’s TFA 4 Activities:

Strengths	Weaknesses
Student Learning: The district has nearly a 2 to 1 computer to student ratio providing access to the network and Internet to a significant portion of our population consecutively.	Resource Distribution: District computers are aging and quickly going to need to be replaced or rotated out.
Technical Support: The media specialists and technology coordinator are quick to take care of computer needs.	
Policies and procedures: Policies and procedures have created a 3 year rotation on high use computers such as labs. This is designed to allow computers to filter into classrooms on a regular basis	Technical support: District equipment is aging which causes more chance for computer repair needs and issues.
Administration: District use software has progressed well and kept up to date which allows for a better range of usage and communication district wide.	Policies and Procedures: Failures to follow the 3year rotation because of budget restraints in recent years has led to over used and aged computers in the district.,

Resource distribution * Data Analysis:

Table: 2 – Raw Data lists a comprehensive inventory of data analyzed. We used appropriate data pertaining to the Resource Distribution TFA to identify strengths and weakness of our current resource

distribution. The data used included information from surveys and records, Technology budget and Total Cost of Ownership. This provided us direction in developing action plans and steps for the 2006-2009 Technology Plan.

The essentials when dealing with resources are to keep pace at a reasonable rate with evolving technology. The district has made strides in creating a minimum standard for Operating system and applications program. It would benefit the district to reach a high level of standardization with all of the programs that it uses.

District strengths and weakness of Resource Distribution and Use:

Resource distribution * Goal:

Acquire, utilize, and maintain a variety of appropriate modern instructional technology resources to enable and facilitate instructional strategies that promote technology literacy and improve student performance.

Resource distribution * Objective(s):

Objective 1: Improve the technological learning environment for all students, the progress of which will be measured by reviews of equipment and application updates based on current district standards and what teachers feel is a need.

Action Plans and Implementation of TFA 4, Resource Distribution and Use:

The above mentioned objectives led to the following action plans that will generate steps to improve technical support in the district. MSIP and CSIP standards are linked to these action plans.

In addition, a technology coach will be provided professional development in the area current educational technologies to provide students the best possible education for preparation for the future. Lathrop R-II wants to prepare our students for the future. We are eager to change how children are educated and bring education out of the mid 20th century the way our grandparents learned and prepare our students for a competing global society. I feel that the use of a technology coach would be a central tool in our transition at Lathrop R-II.

Resource distribution * Action Plan Objective 1: Improve the technological learning environment for all students, the progress of which will be measured by reviews of equipment and application updates based on current district standards.

MSIP standard	CSIP strategy	Action Step/Activity (Strength & Weakness table Reference)	Person Responsible	Funding Source	Timeline / Completion Date
39,14.4,9.5	3.3.3, 3.3.4, 3.4.6, 5.6.3, 5.2.3, 5.3.3, 6.3.4	The district will update and maintain hardware and software as is needed or requested for the betterment of the learning process	Technology director, Administration	unknown: District budget	ongoing, reviewed yearly
39,14.4,9.5	3.3.3,3.3.4,5.3.3.	Seek e-rate funding for networking hardware and	Administration	e-rate,	2012-2013,

		infrastructure		district funds	2012-2013, 2013 -2014
39,14.4, 9.5	3.3.3, 3.3.4, 3.4.6, 5.6.3, 5.2.3, 5.3.3, 6.3.4	The district will, when funding is available, rotate in new technologies to supplement and improve the learning environment.	Technology director, Administration	unknown: District budget	ongoing, reviewed yearly

Resource distribution * Evaluation:

Evaluation of each action step, objective and overall goal will be done according to the guidelines on page 30.

TFA 5: Technical Support

Review of Previous Technology Plan’s TFA 5 Activities:

Goal	Result	Status
Provide adequate and timely technology support and maintenance for the students, staff and administration.	Currently the technology department is supported by the technology coordinator, Norman Carlock, one part time assistant who donates her time to the district, Carol Balfour, and one experienced works aide who is consistently having his hours cut, Rick Adkins. Additionally several items are taken care of in building when Andrea Hieronymus or Betty Campbell or occasionally another teacher can help with the situation.	With the large variety of products supported in the district; (Security Systems, Fire Alarm systems, Video systems, computers, networking components, servers, phone system, etc) There is usually a backlog of issues to complete. A large number are completed in a timely manner while some things are forced to wait.

Technical Support * Data Analysis:

Table: 2 – Raw Data lists a comprehensive inventory of data analyzed. We used appropriate data pertaining to the Technical Support TFA to identify strengths and weakness of our current Technology Department. The data used included information from policies, procedures and other documentation, surveys and records, Technology Budget and Total Cost of Ownership. This provided us direction in developing action plans and steps for the 2012-2015 Technology Plan.

District work orders tend to reflect that in general work is done in a timely matter, although at times because of heavy work loads the amount of work requires prioritization that makes it so that some jobs are not achieved in a timely fashion.

District strengths and weakness of technology support:

Strengths	Weaknesses
Technical Support: A full time technology coordinator is employed by the district	Technical Support: 600+ district computers to 1 FTE district hired technical support person is greater than the state standard of 250:1
Policies and Procedures: Standard minimum operating system is windows XP or better. The district also has board policies governing usage and	Policies and Procedures: Because of financial constraints in recent years, lab rotation has been put off. Because of this equipment fails to get

rotation policies to maintain an updated environment.	upgraded in a timely fashion.
Resource Distribution: We do have a very good computer to student ratio in the district and several available labs. We have updated technology with smart boards, whiteboard and projection devices in most class rooms within the district. Additionally buildings have other forms of technology for usage such as: document cameras, cameras, DVD and/or VCR players, digital microscopes, Clicker system etc.	Resource Distribution: Most equipment is aging and reaching its end of life for current technology and needs replaced. Many items are consistently in need of repair which costs additional money for support.

Technical Support * Goal:

Provide adequate and timely technology support and maintenance for the students, staff and administration.

Technical Support * Objective(s):

Objective 1: Provide adequate and timely technology support and maintenance for the district; 90% of technology problems will be fixed or replaced within 48 business hours, this will be measured by time stamping and maintenance of district work orders.

Action Plans and Implementation of TFA 5, Technical Support:

The above mentioned objectives led to the following action plans that will generate steps to improve technical support in the district. MSIP and CSIP standards are linked to these action plans.

Technical Support * Action Plan Objective 1: Provide adequate and timely technology support and maintenance for the district; 90% of technology problems will be fixed or replaced within 48 business hours, this will be measured by time stamping and maintenance of district work orders.

MSIP standard	CSIP strategy	Action Step/Activity	Person responsible	Funding source	Timeline / Completion date
39	5.25, 5.2.3, 5.1.2,4.6.3,3.2.5	Survey schools to assess versions of district software to maintain up to date software, which will alleviate application and operating system issues.	Technology Coordinator, Library Media Specialists	\$10,000: District Budget	Yearly 2012-2015: reviewed yearly in June.
9.5, 39	3.3.3, 3.3.4, 3.4.6, 5.6.3, 5.2.3, 5.3.3, 6.3.4	The district will maintain or provide additional technology staff to meet the state standard of one technician per 250 computer stations.	School board, superintendant	\$45,000: District Budget	Yearly 2012-2015: reviewed yearly in June.
9.5, 39	3.3.3, 3.3.4, 3.4.6, 5.6.3, 5.2.3, 5.3.3, 6.3.4	The district will maintain a 3 year rotation on labs to keep newer easier and cheaper to maintain equipment in place.	School board, superintendant	\$50,000: district budget	Yearly 2012-2015: reviewed yearly in June.

Technical Support * Evaluation:

Evaluation of each action step, objective and overall goal will be done according to the guidelines on page 30.

Disseminate, Monitor and Evaluate the District Technology Plan

Dissemination

The Technology plan progress will be presented to the following internal groups and stored on district network resources for viewing by:

- Lathrop R-II School District board of Education
- District Administrators
- Annual progress report for technology
- Staff

In addition, the technology plan will be disseminated to outside parties through the following means:

- District web site (<http://lathrop.schooldesk.net>)

Monitoring

The technology committee will meet annually to assess and monitor the attainment of goals and objectives. The technology director, technology committee, superintendent, and administrators and board of education will utilize the plan for yearly goals and objective setting. A wide variety of data sources were utilized in the creation of this technology plan to evaluate strengths and weaknesses and derive goals and objectives. This analysis of data will help us to make timely corrections to assure that as many components of the technology plan as possible are being addressed.

Evaluation

The collection and evaluation of data sources is a continuing process with in the district. Additional surveys and follow-up materials will be produced by the technology committee and implemented as deemed necessary. They will serve as the basis of recommendations and correction strategies as required in the future.

- Building Technology Committees will meet annually and report progress of any goal that relates to their building. This will include staff needs assessment as it relates to technology and curriculum and resource distribution
- MAP scores and district assessments continue to be analyzed and summarized to show progress according to stated objectives in this plan.

- Administrators will meet and formulate correction strategies to focus on any objectives not being advanced.
- Pre and post surveys will be administered yearly and results acted upon for the completion of stated objectives.

The yearly report will be submitted to the Lathrop R-II School District Board of Education for further review and action yearly in June.