

Blue Springs School District

Technology Plan

2007 - 2010

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Introduction

Analysis of current data has led to a re-evaluation of our present District technology plan. Advances in the use of technology, especially in the field of Instructional Technology, coupled with the exploding use of our system require a second look at our present network capabilities and the instructional use of our network.

Instructional Technology

An ever increasing amount of instructional technology has become available to the District's instructors. With this has developed the need for methods to adequately use, control, direct and evaluate the many possibilities. Instructors need, and have requested, additional training in how to effectively use the technology in the classroom. A top level plan for introduction of technology into the curriculum and the classroom needs to be developed and a Department of Instructional Technology established to work in close concert with the District instructors and the District technology support group.

Network Infrastructure

The primary purpose of the District's network infrastructure is to support students, faculty, and staff in meeting their research, instructional, and administrative needs. New demands on the infrastructure will include the following capabilities:

- Collaboration: teachers and students in multiple locations can share their work and interact in real time through video, audio, shared whiteboards, and shared laboratory notebooks, etc., available to all collaborators online. These applications can be applied in virtually any curriculum.
- Distance learning: Delivery of courses and programs over the Internet has extended significantly the reach of education to a wider geographic area and demographic populations.
- Video teleconferencing: Transmission of video via high-speed, large-bandwidth connections has broad applications in bridging time and place for geographically dispersed students and faculty.
- Access to distributed databases: Information access underlies all aspects of the District's functions, both academic and administrative.
- Wireless technology: Effective wireless connectivity to advanced networks extends the boundary of the traditional network infrastructure.

It is imperative that the District's network infrastructure support the above models. Our present network backbone configuration has served the District well. However, the existing Frame Relay network had quickly become oversubscribed. The rapid implementation of new XP workstations with Gigabit network connections and the widespread use of Microsoft Office Applications and streaming audio and video curriculum had seriously impacted the ability of the current network to deliver adequate bandwidth.

Student progress in the future will depend greatly upon building on the success the District has had in bringing the Instructional side and the Infrastructure side of technology together.

Executive Summary

Drawing from the various data sources certain needs have been identified in each of the Technology Focus Areas (TFA). To address these newly identified needs it has been determined to adopt the following action plans:

Student Learning Technology Focus Area 1:

Analysis of data available indicates that varying levels of technology is being introduced to the students at different grade levels. A need for Technology Instructional Sequencing has been identified. We need to establish guidelines for introduction of technology and a technology boundary between grades (i.e. keyboarding at 3rd grade, Notepad at 4th grade, basic PowerPoint at 5th).

- Technology levels should build towards desktop competency upon exiting 8th grade.
- Technology levels in High School should lead towards occupational level uses.
 - Require a test for graduation
- Students are using labs without basic training in browsers, keyboard, or desktop navigation.

1. **The District will align and sequence the integration of technology with the National Education Technology Standards (NETS) for students performance indicators.** See Appendix D.

Various software programs have been introduced for educational purposes. An evaluation of the effectiveness of these software programs needs to be made prior to the purchase of the software and after the programs have been in place. Individual purchases by building or

Blue Springs School District Technology Plan

teacher may not be as cost effective as centralized purchasing. Also, centralized purchasing will be more supportive of equity issues within the District.

- 2. The newly established Instructional Technology Department will develop procedures and guidelines for the purchase and evaluation of instructional software.**
-

As the students become more dependent on technology a need has been identified for access to a document storage area.

- 3. Individual student identity, logins, and storage areas will continue to be provided for students** at the appropriate grade levels.

Teacher Preparation Technology Focus Area 2:

Analysis of responses to teacher surveys, individual technical support job requests and direct observation indicates a wide range of technical skills and the ability to integrate technology into the classroom by the classroom teacher exists.

- 4. The District will establish a minimum level of technical skills for teachers –**
The Missouri Education Technology Plan suggests using PETI surveys and the establishment of LoTi Levels of Technology Integration.

- Minimum standards and assessment will be developed for teachers

- For new teachers during the interview process.
- Have training opportunities provided during probationary period.
- Development opportunities and incentives will be provided for existing teachers to upgrade their skills as determined through assessments.
- Observations to assess the integration of technology.
- Set goals and objectives based upon LoTi Levels of Technology Integration.
 - See Appendix A.

Administration / Data Management / Communications Technology

Focus Area 3:

Analysis of individual technical support job requests and direct observation indicates a wide range of technical skills levels exists in the Administrative personnel.

5. The District will establish a minimum level of technical skills for Administrative personnel.

- Minimum standards and assessment will be developed for secretaries
 - For new secretaries during the interview process.
 - Have training opportunities provided during probationary period.
- Development opportunities and incentives will be provided for existing administrative personnel to upgrade their skills as determined through assessments.



Presently, varying levels of technology assisted registration processes are used in the District. Some schools offer a more automated method of registering returning and multiple student families.

6. **The District will capture best practices and make them available District wide.** A computerized method of registration will be investigated.

Resource Distribution and Use Technology Focus Area 4:

The introduction of technology into the schools needs to be more centrally controlled. Individual schools purchase and implement various technical resources without oversight for infrastructure compatibility or adherence to curriculum guidelines or best practices. Loss of volume purchase capability is occurring. Equitable resource distribution is impeded by separate technology budgets and disparate outside funding sources (i.e., PTA and Prime Time.) Fiscal year budget periods do not allow for the best use of technology maintenance and upgrade issues during the off months in the summer.

7. **The District will re-evaluate the District wide minimum technology standard for each classroom.**
 - Present CRT type TV's will soon be obsolete and irreplaceable.
 - Redistribute TV's from LCD projector system equipped classrooms to classrooms without TV's
 - Long tem, have one LCD projector system per classroom
 - Smart / Team boards purchases should be decreased

- Increase the number of labs available
 - Long term, begin the assimilation of the labs into the classrooms.
8. **The District will establish a district wide fund to promote technology equity within the district**
 9. **The District will establish Technology as a line item in the District budget to meet the new proposed state standards.**
 10. **The District will centralize control of all technology budgets and investigate shifting the Technology Department fiscal year to begin on April 1st.**
 11. **The District will fund the Technology Department to provide for on-going technology training and professional development of all technology support staff.**
 12. **The District will begin a yearly rotation plan on existing lab computers to allow for orderly and efficient replacement of all District lab equipment every three years.**
 13. **The District will establish facilities for technology training, repair, storage, receiving and shipping and normal departmental functions.**

Technical Support Technology Focus Area 5:

14. The District will establish a District Level Instructional Technology

Department

This department will:

- Set technology skill level standards and policies
 - For certified, classified and administrative positions
 - Conduct skill level assessment for certified, classified and administrative positions
- Communicate technology policies to faculty
- Provide training to teachers focused on integrating technology into the classroom
- Provide training on upgrades to existing software
- Conduct or oversee summer offerings of technology training for teachers and administrative personnel
- Evaluate new software programs for effective education
- Evaluate the effectiveness of existing district software
- Work with Network Engineer for compatibility of software with infrastructure
- Consolidate a collection of resources and best practices
- Create a library of technology resources for each grade level
- Capture and utilize the best practices curriculum related programs the teachers are creating and distribute throughout the district.

The leader of the newly established Instructional Technology Department should be at the Director level reporting to the Assistant Superintendent of Curriculum. This person will provide the vision and leadership for the District's acquisition and use of technology for instruction and manage the District's Instructional Technology team.

The Instructional Technology team shall consist of:

- One full time qualified support person per Elementary School and one for each 50 teachers in higher level schools.
 - To meet the Missouri Education Technology Strategic Plan proposed requirements for 2006 – 2011 this support person should be an experienced certified teacher with technology integration experience.
- The District will move towards replacing present teacher technicians with a full time permanently assigned Instructional Technology support person in each building.

15. The District will add two additional Technical Support Personnel - Currently, the District has one technical support person for every 363 computing devices. The Missouri Education Technology Plan for 2006 -2011 specifies one person for every 300 computing devices.

16. The District will add a Network Engineer position to the Technology Department - The Missouri Education Technology Plan specifies each District will have a person designated as a Network Administrator. This is a new position to be added to the present Technology Department.

- To monitor Network performance
- Network maintenance
- Security
- Make necessary and timely upgrades to infrastructure
- Evaluate instructional software for infrastructure needs and support
- Data back up systems

17. The District will begin a formal certification training program for Technology Specialists with incentives for certification. On going training must be funded to keep pace with new applications and technologies. Professional Development will empower the current support staff with the tools needed to diagnose and repair more complex issues. Training will also allow for better evaluation and comparison of capabilities among all support staff.

District Profile

Community Profile

The Blue Springs School District population grew at a rate of 26.5% from 1990 to 2000. We now have over 80,000 residents within the school district. The average household income in the district in 1999 was \$68,601. Both spouses work in 71.8% of the households in the district.

Community Ethnicity and Economic Indicators

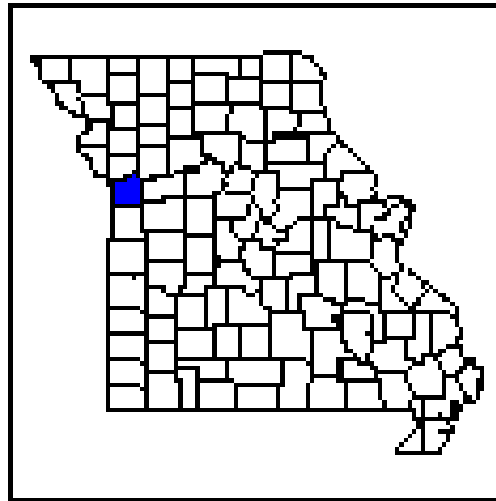
Student Demographic	2000-01 School Year		2004-05 School Year		5 Year Change	
	Blue Springs	State	Blue Springs	State	Blue Springs	State
Asian	1.5%	1.2%	1.7%	1.5%	0.2%	0.3%
African American	4.8%	17.4%	8.1%	17.8%	3.3%	0.4%
Hispanic	2.4%	1.8%	3.6%	2.8%	1.2%	1.0%
Native American	0.2%	0.3%	0.3%	0.4%	0.1%	0.1%
White	91.1%	79.3%	86.2%	77.6%	-4.9%	-1.7%
Free/Reduced Lunch	8.0%	37.1%	14.1%	41.8%	6.1%	4.7%

Source: DESE Student Demographics as of Oct. 3, 2005

The item “Students who qualify for free or reduced lunch” is an indicator that helps the district to evaluate the possible uses of technology within the student’s home. This figure has grown from 8% to 14.1% within the last five years, a 57% growth.

Geographic Profile

The Blue Springs School District, located on the eastern edge of the Kansas City metro area in Jackson County, covers a total of 58 square miles and includes students from the communities of Blue Springs, Grain Valley, Independence, Lake Tapawingo and Lee's Summit.

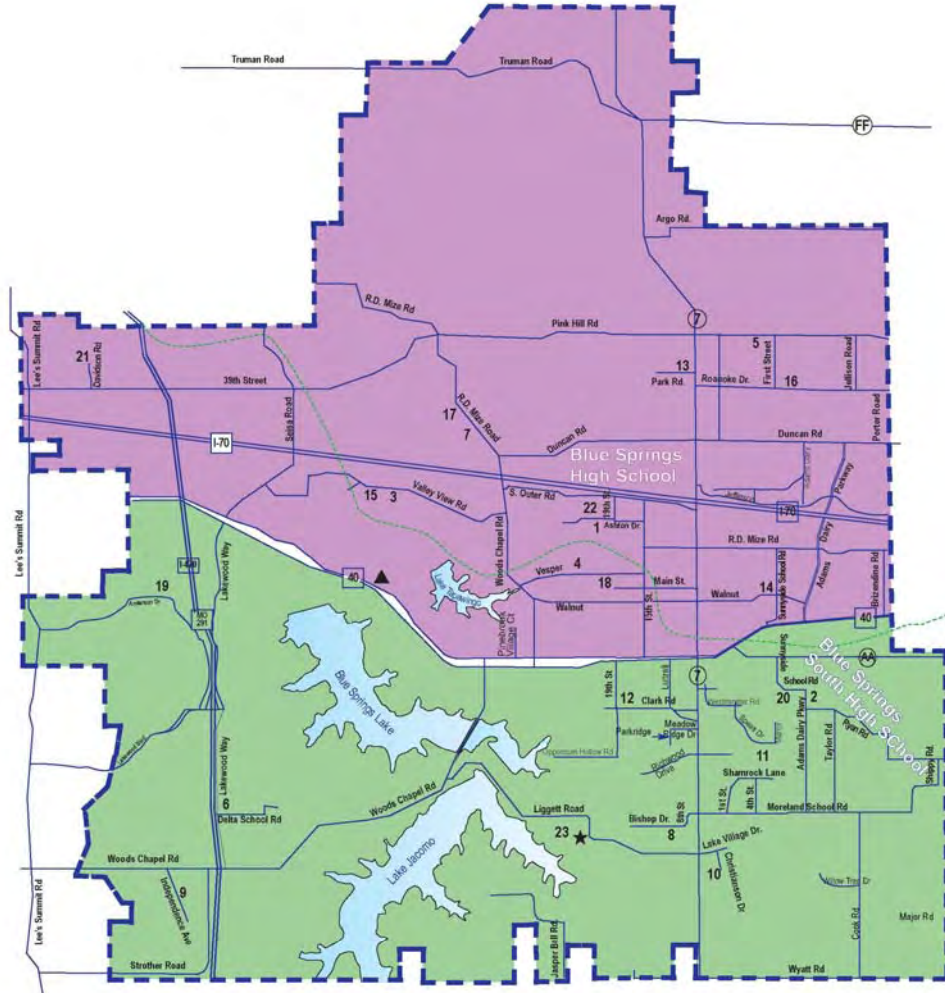


Jackson County, Missouri

The district boundary between Blue Springs High School and Blue Springs South High School follows Missouri State Highway 40 which bisects the district from East to West. Delta Woods Middle School district covers the western side of the district. Moreland Ridge Middle School covers the remainder of the Southern portion of the district that is served by Blue Springs South High School. The remainder of the Northern portion of the district that is served by Blue Springs High School is divided between Brittany Hill Middle School and Sunny Vale Middle School. The Freshman Center is located close to the mid point of the district and serves all 9th grade students. Valley View High School serves the entire district

and parts of other Eastern Jackson County school districts. These schools are supported by 13 elementary schools.

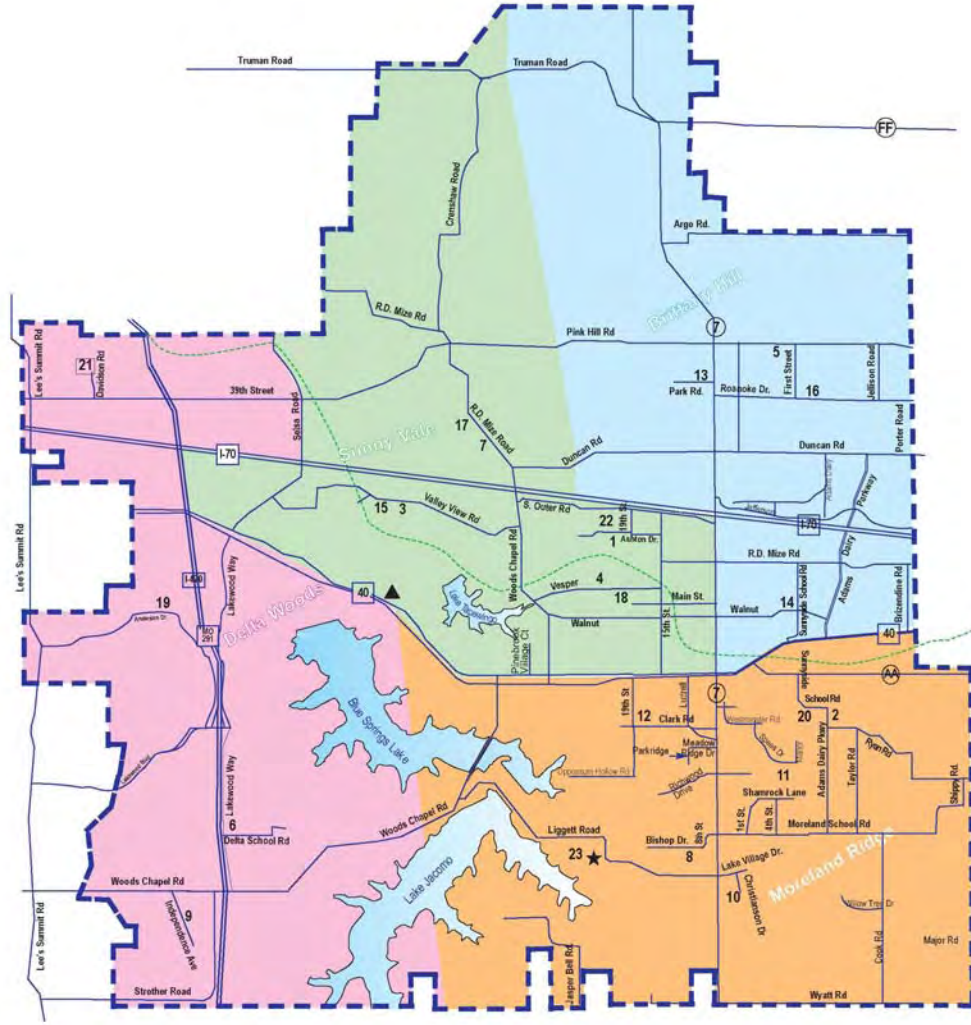
High School Attendance Boundaries



Blue Springs School District High School Attendance Boundaries

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 224-3459
Blue Springs High School
2000 NW Ashton Drive, Blue Springs, MO 64015 4 4 224-1325
Freshman Center
2103 NW Vesper, Blue Springs, MO 64015 ★ 224-1300
Central Office
1801 NW Vesper, Blue Springs, MO 64015 22 224-1740
Parents as Teachers
2009 NW Ashton Dr, Blue Springs, MO 64015 | <ul style="list-style-type: none"> 2 224-1315
Blue Springs South High School
1200 SE Adams Dairy Parkway, Blue Springs, MO 64015 3 224-4388
Valley View High School
5000 NW Valley View Rd, Blue Springs MO 64015 ▲ 224-1385
Transportation Center
5395 SW U.S. 40 Westbound Hwy, Blue Springs, MO 64015 23 224-1360
Liggett Trail Education Center
3575 SW Liggett Road, Blue Springs, MO 64015 |
|--|--|

Middle School Attendance Boundaries



Blue Springs School District Middle School Attendance Boundaries

- 5** Brittany Hill 224-1700
2701 NW 1st Street, Blue Springs, MO 64014

7 Sunny Vale 224-1330
3930 South RD Nize Road, Blue Springs, MO 64015

★ Central Office 224-1300
1801 NW Vesper, Blue Springs, MO 64015

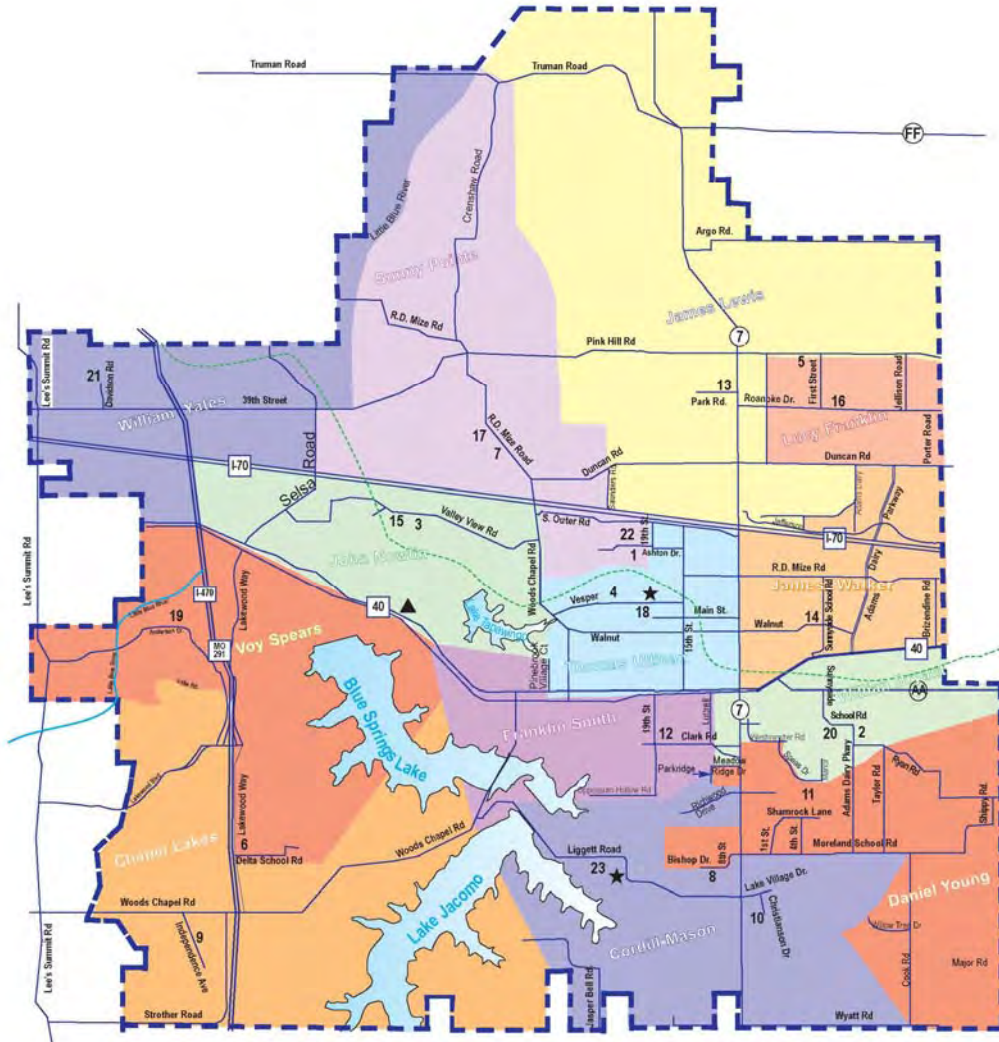
22 Parents as Teachers 224-1740
2009 NW Ashton Dr, Blue Springs, MO 640156
- 6** Delta Woods 795-5830
4401 NE Lakewood Way, Lee's Summit, MO 64064

8 Moreland Ridge 224-1800
900 SW Bishop Drive, Blue Springs, MO 64015

▲ Transportation 224-1385
5395 SW U.S. 40 Westbound Hwy, Blue Springs, MO 64015

23 Liggett Trail Education Center 224-1360
3575 SW Liggett Road, Blue Springs, MO 64015

Elementary School Attendance Boundaries



Blue Springs School District Elementary Attendance Boundaries

- 9 **Chapel Lakes** 525-9100
3701 NE Independence Ave, Lee's Summit, MO 64064
- 10 **Cordill-Mason** 224-1370
4001 SW Chistianen Rd, Blue Springs, MO 64014
- 11 **Daniel Young** 224-1335
505 SE Shamrock Lane, Blue Springs, MO 64014
- 12 **Franklin Smith** 224-1375
1609 SW Clark Rd, Blue Springs, MO 64015
- 13 **James Lewis** 224-1345
717 NW Park Rd, Blue Springs, MO 64015
- 14 **James Walker** 224-1380
201 SE Sunnyside School Rd, Blue Springs, MO 64014
- 15 **John Nowlin** 224-1355
5020 NW Valley View Rd, Blue Springs, MO 64015
- ★ **Central Office** 224-1300
1801 NW Vesper, Blue Springs, MO 64015
- 22 **Parents as Teachers** 224-1740
2009 NW Ashton Dr, Blue Springs, MO 64015
- 16 **Lucy Franklin** 224-1390
111 NE Roanoke Dr, Blue Springs, MO 64014
- 17 **Sunny Pointe** 224-7800
3520 South RD Mize Rd, Blue Springs, MO 64015
- 18 **Thomas Ultican** 224-1365
1813 NW Main, Blue Springs, MO 64015
- 19 **Voy Spears** 478-8899
201 NE Anderson Dr, Lee's Summit, MO 64064
- 20 **William Bryant** 224-1340
1101 SE Sunnyside School Rd, Blue Springs, MO 64014
- 21 **William Yates** 224-1350
3600 Davidson Rd, Independence, MO 64055
- ▲ **Transportation** 224-1385
5395 SW US 40 Westbound Hwy, Blue Springs, MO 64015
- 23 **Liggett Trail Education Center** 224-1360
3575 SW Liggett Road, Blue Springs, MO 64015

Academic Profile

For the sixth year in a row the Blue Springs School District has received a perfect score on the Annual Performance Report from the Department of Elementary and Secondary Education. This report is based on MAP scores, ACT scores, percentages of students in advanced and vocational courses, graduation rates, and attendance. Overall, these scores indicate that the district is consistently providing students the best learning opportunities and assuring they are prepared to be knowledgeable and productive members of society.

We have award-winning extracurricular programs.

The goals adopted by the Blue Springs School District in The Comprehensive School Improvement Plan (CSIP) include:

- Goal 1: The District will improve student achievement rates in all grades on the Missouri State Performance Assessments. The district will provide adequate yearly progress that will require all students to meet or exceed the state's proficient level in the area of Communication Arts and Math.
- Goal 2: The District will improve reading skills at all grade levels to ensure all students meet or exceed the state standards for reading competency.
- Goal 3: The District will maintain its dropout rate (under 3%) during the next three years.
- Goal 4: The District will improve vocational enrollment.

The vision for Technology stated in the CSIP plan included:

- Technology is a tool to improve student learning and facilitate information access and communication for all staff and students.
- Technology is used to give students and staff access to global information systems.
- Technology is used to connect the school, the home, the community, and the world.
- Technology will impact not only what students learn but also how they learn.

The District's last Missouri School Improvement Planning (MSIP) review was completed in March, 2002

District Demographics

Our mostly middle to upper-middle class community enjoys a stable economy. Within our school district boundaries, we have more than 80,000 residents. Our close proximity to Kansas City allows residents easy access to a variety of social, cultural and educational opportunities. There is also convenient access to over 54 colleges, universities and technical schools in the metro area.

The Blue Springs School District facts:

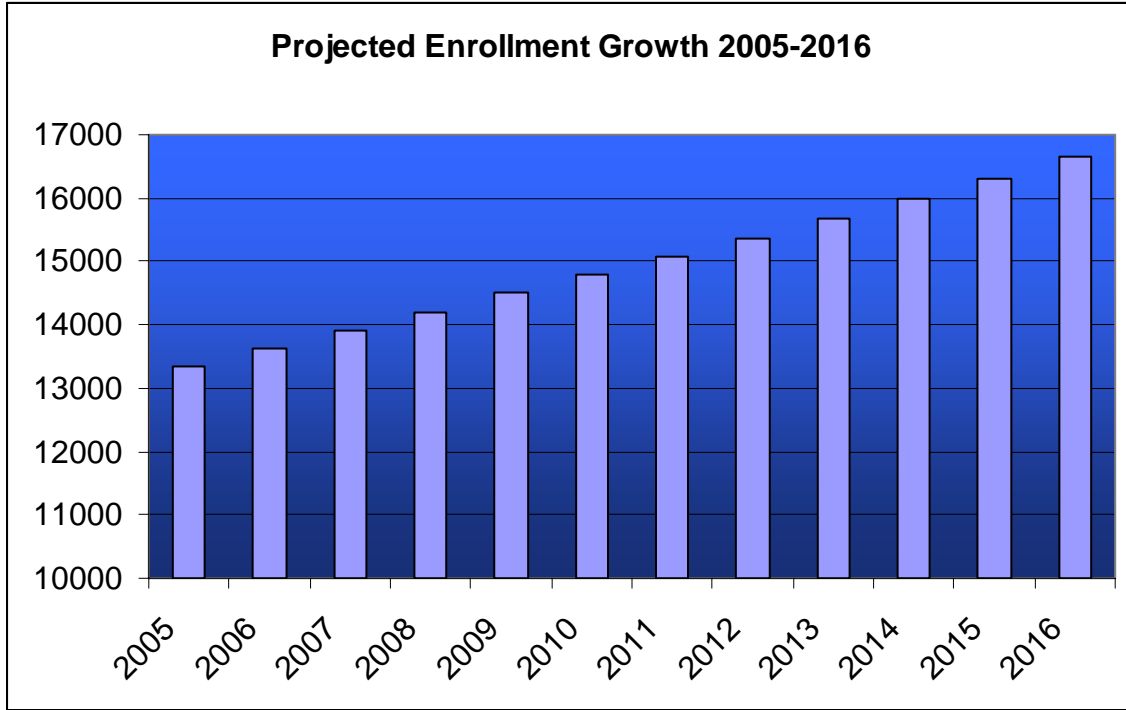
- 2,086 Employees
- 41st Largest Employer in the Kansas City Metro Area
- Fifth Largest Employer in Eastern Jackson County
- 25 Separate Facilities
- Over Two Million Square Feet of Building Space
- 422 Acres of Property
- 159 School Buses
- 10,000 Bus Riders Daily
- The buses run over Two Million Miles Per Year
- \$3,000 Per Day for Gasoline
- Close to 16,000 Lunches Served Per Day
- Over 300 miles of computer network cabling across the district

Within the district we have the following school buildings:

School Type	Number of buildings in District	Enrollment
Elementary (K-5)	13	6167
Middle School (6-8)	4	3064
Freshman Center (9)*	1	1059
High School (10-12)	3	2589
Liggett Trail Education Center*	1	207

*A new Liggett Trail Education Center was completed in the summer of 2006. Special Services moved to Liggett Trail Education Center. The space vacated by the Special Services Center was absorbed by the Freshman Center.

Projected District Enrollment Growth



Annual enrollment is approximately 13,700 (a 47% increase since 1980). This rate of growth is expected to continue over the next 10 years. We are one of the fastest growing areas in the state, increasing our student body by 400 each year.

Technology Committee

The Blue Springs School District Technology Committee is composed of teachers, administrators, board members, library/media specialists, technical support specialists, parents, community members, and students. The committee is approximately 60 members. This committee in its entirety meets quarterly throughout the year. Discussion includes immediate technological concerns and future planning in the area of district technology.

In addition to the overall group, the committee is divided into subgroups which reflect the five Technology Focus Areas outlined by DESE. These subcommittees meet at least quarterly to discuss, research, and assist in the implementation of the district technology plan. These groups include:

CAC Technology Committee – This committee is comprised of community members, parents, teachers, board members, and administrators and focuses on current technology implementation and future needs of the district. They also provide the district necessary input from the community and parents as to the perceptions and needs of the district. These issues address TFA 1, 2, 3, 4, and 5.

Building Level Technology Committee - These are members from each school building in the district, district level administration and the director of technology to address both the immediate issues for each building and district-wide and the needs of teachers and students in the area of technology and training. This committee addresses TFA 1, 2, 3, 4, and 5.

Professional Development Technology Committee – This committee deals directly with the teacher and staff training for the effective use of technological tools as they relate to teachers and students. This committee addresses TFA 1, 2, and 5.

Administrators Technology Committee – This committee assists in the dissemination of information to the building and the planning for future needs in the areas of teacher and student needs. This committee addresses TFA 3,4, and 5.

Web Policy Committee – This committee assists in the planning and enhancements of the district Website. They are responsible for page approval, policy development and implementation plans. This committee addresses TFA 3 and 5.

Student Management Technology Committee – This committee was created with the implementation of a new student management system and was designed to assist in the set-up, and training of the system as well as on-going support for the schools. This committee addresses TFA 2,3, and 5.

Curriculum Technology Committee – This committee assists in the direction of technology and its implementation as it relates to curriculum, student learning and teacher training. This committee addresses TFA 1,2,3,4, and 5.

Technology Software Committee – This committee assists in the research and acquisition of software for student learning, teacher delivery, and teacher productivity. This committee addresses TFA 1,2,3, and 4.

Technology Hardware Committee – This committee assists in the research and acquisition of hardware for student learning, teacher delivery, and teacher productivity. This committee addresses TFA 1,2,3, 4, and 5.

Members of the overall technology committee are appointed/elected and serve rotating three-year terms. This allows for continuation without all members being new at any time. Those members of subcommittees are appointed from the overall committee and serve the same three-year term.

Technology Committee Members and Their Subcommittee Memberships

First Name	Last Name	School	Position	Committee(s)
Cheryl	Adair	CO	Secretary	TC / SMTC
Terry	Allee	CO	Director of Special Education	TC / TC / ATC
Paul	Anwander	Community Member	Parent	TC / CAC
Jeremy	Baker	BSSHS	Teacher	TC / BLTC
Janet	Baldwin	HMEC	At-Risk Advisor	TC
JoDee	Belzer	CO	Technology Secretary	TC / THC / TSC
Mayfield	Brad	BSHS	Teacher	TC / CAC
Chris	Bradshaw	Community Member	Parent	TC / CAC
Jim	Brandner	BSHS	Teacher	TC / THC
David	Brouse	CO	Director Elementary Curriculum	TC / CTC
Rhonda	Brown	SVMS	Teacher	TC / THC
Karen	Capron	BSHS	Teacher	TC / WPC / THC
Amy	Cates	JNE	Teacher	TC / PDTC
Jane	Cochran	LFE	Teacher	TC / BLTC
Michele	Cole	BSSHS	Teacher	TC / PDTC / THC / TSC / WPC
Steve	Cook	DWMS	Principal	TC / ATC / TC / SMTC / TSC
Teresa	Cosan	CO	Secretary	TC / ATC
Jill	Courter	DWMS	Teacher	TC / TSC
Bill	Cowling	CO	Director of Bldgs & Grounds	TC / ATC / SMTC
Debbie	Crews	Transportation	Secretary	TC / TSC
Pat	Crowe	CO	Director Human Resources	TC / ATC / TC / SMTC
Teresa	DeWeese	DYE	Teacher	TC / PDTC
Karen	Doolin	MRMS	Teacher	TC / BLTC / TSC
Win	Edwards	SVMS	District Nurse	TC
Dave	Elton	CO	Director of Technology	TC / ATC / PDTC / SMTC / THC / TSC / WPC
Lynda	Elton	CME	Teacher	TC / PDTC
Leslie	Evans	CO	Director of Info & Public Relations	TC / SMTC / CTC / WPC
Linda	Friedel	BSHS	Teacher	TC / WPC
Maritta	Frizzell	BHMS	Secretary	TC / PDTC
Karst	Georgene	Community Member	Community Member	TC / CAC
Christine	Gibler	WYE	Teacher	TC / PDTC
Sandy	Greco	BSHS	Secretary	TC / SMTC
John	Hohensee	CO	Tech Support	TC / PDTC / THC / TSC
Terri	Holstrom	SVMS	Teacher	TC / PDTC / TSC
Gavin	Houston	CO	Tech Support	TC / PDTC / THC / TSC
Roy	Hutchinson	CO	Tech Support	TC / PDTC / THC / TSC
Debbie	Jermone	CO	Secretary	TC
Georgene	Karst	Community Member	Parent	TC / CAC
Stacie	Kemp	Community Member	Parent	TC / CAC
Kelly	Knudsen	DWMS	Library Media Specialist	TC / TSC
Christine	Komen	MRMS	Teacher	TC / TSC
Randy	Laskowski	CO	Asst. Director of Special Ed	TC / TC / ATC / SMTC

Jerry	Leeper	MRMS	Teacher	TC / SMTC
Marsha	Lockard	CLE	Teacher	TC / PDTC
Robert	Marble	BHMS	Teacher	TC / PDTC / TSC
Dave	Martin	CO	Tech Support	TC / PDTC / THC / TSC
Keith	Maxey	BSSHS	Principal	TC / SMTC
Jill	McComas	MRMS	Library Media Specialist	TC / TSC
Becky	McKelvey	FC	Secretary	TC / PDTC
Shawn	Mehaffie	Community Member	Parent	TC / CAC
Nikki	Meyers	PAT	PAT	
Jessica	Milam	WYE	Teacher	TC / PDTC
Jeannie	Mitchell	MRMS	Secretary	TC
Sue Ann	Myers	LTEC	Teacher	TC / PDTC / TSC
Teresa	Nightingale	BSSHS	District Nurse	TC
Marlene	O'Neal	DYE	Secretary	TC / SMTC
Jim	Osborn	Community Member	Parent	TC / CAC
Teresa	Patterson	CO	SASI Support	TC / SMTC
Rechele	Ross-White	FC	Teacher	TC / THC
Lea Ann	Rothmier	Community Member	Parent	TC / CAC
Eric	Sapp	BSSHS	A+ Coordinator	TC / PDTC / TSC
Terri	Schmidt	CO	Secretary	TC / PDTC / TSC
Stacy	Schwaller	TUE	Teacher	TC / PDTC
Cheryl	Scofield	BSSHS	Secretary	TC / SMTC
Annette	Seago	CO	Deputy Superintendent	TC / CTC / SMTC / CAC / WPC
Kathryn	Simcic	CO	Tech Support	TC / PDTC / THC / TSC
Connie	Simmons	BSSHS	Counselor	TC
Karen	Sparks	LFE	Secretary	TC / SMTC
Steve	Spencer	CO	Tech Support	TC / PDTC / THC / TSC
Erin	Swanson	CO	SASI Support	TC / CAC
Jake	Taylor	CO	Tech Support	TC / PDTC / THC / TSC
Rick	Timm	CO	Tech Support	TC / PDTC / SMTC / THC / TSC
Scott	Tom	Community Member	Community Member	TC / CAC
Dallas	Truex	BHMS	Principal	TC / TSC
Rosemary	Walker	Food Service	Food Service	TC / PDTC
Bruce	Wallen	CO	Director of Food Service	TC
David	Witt	Community Member	Parent	TC / CAC
Dave	Wright	Board Member	Board Member	TC / CAC
Dave	Wright	Board	Board Member	TC / CAC
Mike	Young	CO	Tech Support	TC / PDTC / THC / TSC
Scott	Young	CO	Asst. to the Superintendent	TC / THC

*Student names have purposely been omitted from this list for privacy purposes.

District Mission Statement

The mission of the Blue Springs School District is to create a community of life-long learners in which each individual acquires knowledge, develops skills, and functions as a literate citizen to achieve personal goals.

Technology Mission Statement

We are dedicated to providing the most effective technological resources to the members of the Blue Springs School District learning community which includes the following:

- the resources to enhance student learning through the use of technology,
- the resources to increase staff productivity and efficiency,
- the tools to positively impact teacher delivery of instruction,
- the training for staff to utilize the technology implemented; and
- the technology and training to advance the communication among the members of the learning community.

A short-term and long-term comprehensive planning process is in place to assure the most beneficial use of technology. The goals that are created are done so with information from current research, state and national standards, student and staff needs, as well as community input.

Current Status

The district has or will compile data that will directly impact the long and short-term goals of technology. As the district prepares for the following three-year plan, it continues to re-evaluate the needs of the students, staff, and community through a variety of processes to assure the most effective use of technology. The following data has been used to assess and adjust the validity of the goals established.

Student Learning (TFA 1):

- Blue Springs MAP data disaggregated to understand student needs
- Student Surveys upon graduation as to the effectiveness of technology tools and training
- Enrollment in technology courses at the middle and high school level.
- Inventories of technological tools and needs assessment
- Student/Parent survey of needs as they relate to technology
- Library/Media Resource / Technology survey
- MSIP District Response to the Standards (2002)
- MSIP Review AQ Report (2002)
- Missouri Census of Technology
- District-wide assessments created with technological tools
- ACT summary data
- Filtering reports
- Software inventories
- Student Acceptable Use Policy

- Student Internet Use Policy
- Student Technology Resource Policy
- Teacher Technology Resource Policy

Teacher Preparation and Delivery of Instruction (TFA 2):

- Professional development survey of needs
- Professional development research as it pertains to technology
- Professional development goals and objectives
- Teacher trainer evaluation plans and evaluation tools
- Missouri Census of Technology
- Local and state-wide data as it related to teacher training
- Curriculum management tools
- Teacher technology survey
- Library/media technology survey
- Enrollment data
- Annual professional development survey

Administration/Data Management/Communication Processes (TFA 3):

- Student data administration system
- Student data management implementation guide
- Student data management (grade book, attendance, scheduling, health)
- Transportation
- Food Service
- Library Media

- Demographic Planning
- Communication tools – email, internet, intranet
- Website
- Curriculum Management tool

Resource Distribution and Use and Technical Support (TFA 4 and 5):

- Technology budget
- Computer replacement cycle
- Bandwidth analysis
- Network speed analysis
- Fiber use
- Lease agreements
- Wireless technology pilot projects
- Fiscal Management
- Total cost of ownership analysis (hardware, maintenance, lease/rent, etc.)
- Purchasing
- Human resources
- Software inventories
- Equipment inventories
- Technology work-order report

Data Analysis

TFA 1: Student Learning

MSIP Selected Technology Related Questions

MSIP ADVANCED QUESTIONNAIRE	School District							
	Blue Springs	Lee's Summit	Park Hill	Independence	Raytown	Liberty	Ft. Osage	Ref. Group N
SECONDARY STUDENTS SURVEY								
Question-14 : I use computers in school								
<i>Question-14 : I use computers in school Daily</i>	21.63	22.44	27.4	14.8	34.53	24.1	18.33	25.58
<i>Question-14 : I use computers in school Several times a week</i>	15.45	13.03	22.68	11.18	10	28.76	17.7	17.69
Question-37 : My teachers can assist me in using computers effectively	63.9	61.82	57.77	54.93	57.38	62.08	68.17	60.29
Question-61 : I have had lessons in school on how to use computers	60.45	54.13	73.12	49.35	57.86	66.25	74.18	62.4
Question-67 : I know how to use electronic resources to locate information	75.28	76.11	75.95	67.34	71.68	77.33	75.87	71.95

The disaggregation of Student MAP data demonstrated both strengths and weaknesses within the district during the 2004 assessment cycle. Student strengths district wide can be found in the areas of Science, Math, and Social Studies. Of all students taking the ACT 40.6% score above the national average in comparison to the state rate of 34%.

Graduation Surveys indicate that 88% of students felt the technological tools that the district offered were adequate or superior indicating that we as a district are meeting many of the needs of students in the area of technology. Both parent surveys and library/media center surveys indicate that an overwhelming majority felt the resources were adequate yet areas of improvement were indicated.

MSIP data indicated that overall the student learning facilities were superior and student learning was progressing as demonstrated using longitudinal data from the MAP.

Filtering reports indicated that students have a safe learning environment in the area of the Internet and further software was implemented in 2004 school year to assist the district. Upgraded filtering software was implemented in 2005 with plans for an additional hardware solution.

Software inventories indicate a large variety of software for student learning from on-line resources, automated scoring of writing, skills recovery and enhancement, language fluency, GED preparation among others. The compilation of software has assisted the district in determining the needs and fair and equitable distribution of necessary resources.

Student use policies were reviewed and used to determine the direction of student use of technology as a learning tool and the responsibility of the district to create a conducive learning environment as well as the student responsibilities for use.

A survey of teacher technology use was conducted in January, 2005 and January, 2006 and specifically assisted in the determination of student use of technology in the classroom as a learning tool.

Committee discussion indicates that students will benefit from additional lab time. Students at the appropriate grade level have individual usernames and logins to available storage areas at the server level.

It was determined that students would benefit from Technology Instructional Sequencing in the curriculum. Additional guidelines need to be established for introduction of technology and a technology boundary between grades, i.e. perhaps keyboarding at 3rd grade, Notepad at 4th grade, basic PowerPoint at 5th grade. Students who are using labs should be trained on basic use of browsers, keyboards, desktop navigation.

Technology levels should build towards desktop competency upon exiting 8th grade. Technology levels in High School should lead towards occupational level uses. A test requirement for graduation is being considered.

TFA 2: Teachers Preparation and Delivery of Instruction

MSIP Selected Technology Related Questions

MSIP ADVANCED QUESTIONNAIRE

School District

Question	Blue Springs	Lee's Summit	Park Hill	Independence	Raytown	Liberty	Ft. Osage	Ref. Group N
FACULTY SURVEY								
Question-4 : I use computers and related technology in my classes								
<i>Question-4 : I use computers and related technology in my classes Daily</i>	47.19	41.09	43.41	33.53	47.42	40.31	44.78	41.16
<i>Question-4 : I use computers and related technology in my classes Several Times/wk</i>	23.98	23.02	26.54	15.89	14.44	16.93	16.76	19.81
Question-13 : I teach research skills as an integral part of my instruction	59.92	60.26	58.22	48.88	47.21	55.91	65.56	60.18
Question-19 : My school provides regular communications to parents about their child's progress	99.12	98.84	98.84	97.68	94.43	98.23	98.66	97.53
Question-26 : I have received the training I need to help students effectively use computers	66.2	75.39	71.09	49.41	63.96	73.94	78.53	67.84
Question-27 : Technology in my school is considered an integral part of the instructional program	75.92	84.72	76.17	40.64	73.43	81.29	87.9	73.96
Question-28 : I use and integrate computers into my classroom activities	64.19	75.63	71.97	47.4	58.29	72.97	73.9	65.21
Question-32 : I have received adequate training in using computers and other technology to support the curriculum	71.76	76.64	74.92	48.66	72.81	75.84	82.07	70.43
Question-81 : Access to the Internet in my building is reliable	74.12	93.6	93.58	48.42	85.13	89.14	78.76	77.58
Question-82 : Incorporating the Internet into our instructional programs is a high priority in my district	58.2	71.83	61.21	32.12	53.29	70.54	74.53	60.45
Question-83 : I have the educational technology I need to support my instructional program	66.79	73.13	76.48	37.59	70.46	78.84	82.79	66.42
Question-88 : If I wanted to I could easily arrange for my students to use the Internet at school for a class project	63.73	84.64	84.19	50.22	74.14	84.41	85.68	73.74

Surveys in the area of professional development indicated a solid program that needs additional opportunities to train in the area of technology. Teachers also indicated that technology would be more effectively utilized with further training. Teachers expressed the

desire to receive training in integrating the use of technology as well as technical training in the use of software and hardware.

- Research indicates that effective classroom practice needs to include technology but also needs to include comprehensive teacher training for successful implementation. Committee discussion indicated that the District level Instructional Technology Department should be created. A description of this proposal is under the heading TFA 5: Technology Support.

The district established a summer Technology Institute to offer training to certified and classified personnel. We have created on-line support training supplements hosted on an intranet server.

The committees also recommended that the District move towards replacing present teacher technicians with full time permanently assigned Instructional Technology aides in the buildings.

The Missouri Census of Technology indicated that technology partnerships are a growing structure within the public school. In addition, the analysis of the Blue Springs School District technology in comparison to state averages indicated a need to increase the technology per student throughout the district.

Email is a valuable tool within the district and the implementation of posted email addresses on the web for parent access has allowed further communication among members of the learning community. Email traffic has more than tripled within the last year. The number of Mail Exchange servers has been increased to handle the additional load. In addition, the introduction of a new grade book program has allowed automatic emailing of progress reports to parents. This has been a great benefit but will require additional training for teachers and parents for successful implementation. In addition, based on the surveys

given to teachers, the ability to access grade books from home was found to be a need. A subscription service, Positive Networks, has been contracted to address this need. Teacher utilization of software and access to hardware is a concern. All teachers have a desktop computer and access to the Internet for professional use.

TFA 3: Administration / data management / communication processes

MSIP Selected Technology Related Questions

MSIP ADVANCED QUESTIONNAIRE

School District

Question	Blue Springs	Lee's Summit	Park Hill	Independence	Raytown	Liberty	Ft. Osage	Ref. Group N
FACULTY SURVEY								
Question-20: The teachers in my building study the achievement levels of subgroups of students (by race/ethnicity, gender, LEP, migrant and/or disability) and based upon this study take actions to improve the performance of any subgroup which lags behind.	79.36%	48.83%	54.77%	51.33%	79.51%	39.46%	66.58%	48.11%
Question-21 : The school shares with me standardized test results and dropout data disaggregated by disability, gender, and (where appropriate) by race/ethnicity.	67.64%	63.41%	70.38%	68.92%	81.42%	60.59%	75.82%	68.16%
Question-62 : I use student assessment/performance data to plan my instruction.	88.22%	87.46%	82.44%	86.26%	81.00%	86.71%	91.48%	84.20%
Question-78 : Parents are frequently provided information about student performance.	98.74%	98.59%	96.82%	95.66%	91.90%	95.57%	98.66%	96.13%
Question-90 : I use student information from previous classes to plan instruction.	86.74%	83.33%	77.51%	76.76%	78.92%	78.30%	88.37%	80.19%

The implementation of a new student management system was begun during the 2003-04 school year. Extensive training was necessary for staff and support personnel for this. A three-year implementation guide has assisted the district in focusing the speed and direction of this project. The addition to this system was a new teacher grade book that will need further training. A new attendance program has allowed teachers to take attendance from their

desktop computers by clicking on pictures of students has been implemented at the secondary level. The elementary school implementation must also include training of staff.

Data management has been greatly enhanced due to the student management system and data clean up was necessary as it was converted from an antiquated program which resulted in some data loss and inaccuracies. Short-range and long-range plans have been put in place to assure the full usability of the system. Full time student management system support desks have been established to assist faculty and staff in the use of the system.

The fiscal management of the district is conducted through Pentamation software system that is district-wide. This has allowed the entire district to communicate efficiently regarding funds, order status, and procedure. This system was upgraded in 2006. With this comes the need for on-going training as staff changes and software upgrades occur.

The communication process for district staff is primarily through the email system but with the induction of an intranet system, the ability to post information for staff will allow further accessibility and more features for common information storage. All staff have email accounts created by the district. Microsoft exchange servers provide email to over 2,000 accounts district-wide. This email is the main component of district communication and tripled in size over the last year with continued growth. A weekly newsletter is transmitted to staff in PDF format as well as to retired staff. Parent Connect is used to allow parents to view the progress of their students.

The implementation of an Intranet has been planned based on the continued volume of email and need for common communication and storage of information. This will be established in conjunction with the curriculum management tool and is in the planning stages.

The analysis of the Library Media Centers assisted in the direction of new technology acquisition plans as needs were found using student, staff and parent surveys. The

technological needs of the food service and transportation department were also analyzed for future needs. All district building kitchens now have email capabilities to communicate with the food service central office. Transportation has implemented a technological tool, Transfinder, to assist in bus tracking and for check out procedures.

The conversion of the existing website with a content management tool has allowed all vested parties to not only have input into the content of the site but to manage their own portions of the site with little training. This tool has also enabled the district teachers at the middle level to create and maintain teacher and class pages for student and parent access. The needs of the district teaching staff and parents were considered and planning for full implementation across all grade levels has been initiated. Ecurriculum, a curriculum management tool that allows the entire curriculum to be accessible for staff members in an electronic format has been implemented. The cost analysis was studied to determine that the long-term feasibility of paper copies would be more costly as reviews and updates to the curriculum are needed.

Continued automation of the registration process has been identified as a need. Some of the district schools have moved towards an online streamlining of the registration process. This program needs to be expanded throughout the district.

TFA 4: Resource Distribution and Use

Census of Technology District Summary Report for 2004							
Category	BLUE SPRINGS R-IV	LEE'S SUMMIT R-VII	PARK HILL	INDEPENDENCE	RAYTOWN	LIBERTY	FORT OSAGE
Total Computers	2518	4,316	2,271	2,922	2,552	1,537	1,479
-- Students Per Computer	5.13	3.59	4.17	3.78	3.36	4.97	3.29
Internet Capable Computers	2,493	4,280	2,259	2,798	2,552	1,537	1,471
-- Students Per Internet Capable Computer	5.18	3.62	4.19	3.95	3.36	4.97	3.3
Internet Connected Computers	2,467	4,316	2,196	2,616	2,628	2,143	1,463
-- Students Per Internet Connected Computer	5.24	3.59	4.31	4.23	3.26	3.57	3.32
Estimated Number of Total Classrooms	903	999	683	714	558	525	294
-- Estimated Number of Classrooms Yet to Be Connected	-8	-40	30	-21	-27	-19	-4
-- Percent of Classrooms Yet to Be Connected	-0.89%	-4.00%	4.39%	-2.94%	-4.84%	-3.62%	-1.36%
District Enrollment	12,923	15,496	9,460	11,059	8,570	7,640	4,859
Pct Free & Reduced Lunch	12%	10%	17%	37%	38%	13%	39%

A review of the technology budget indicated the need for reallocation of funding and additional funds to be infused into the budget to acquire the tools necessary for all of the continued technology needs found. The Blue Springs School District continues several professional partnerships with technology vendors to assist in gaining necessary tools more economically. These partnerships have allowed the district to begin implementation of such tools as wireless Internet labs using laptop computers for students and through funding in the area of vocational education these labs are beginning to be available to high school students and teachers. The equitable distribution of technology across buildings and levels taught has been examined and areas such as elementary lab facilities have been the focus of improvement.

A three year rotation for teachers' computers has been implemented. A similar replacement cycle for lab computers will be implemented in one year stages starting this year.

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Bandwidth analysis had determined that the conversion to fiber lines was necessary for data to effectively be shared across the district. In addition, network speed was adequate for many applications and has been enhanced for the student management system to be utilized by all through the implementation of fiber connections. Exponential increases in the use of streaming audio and video and extensive use of Internet access is necessitating a re-evaluation of our present system to provide scalability in the future. Over the current network the staff utilizes email and Internet resources, file sharing, storage, and printing services. The addition of servers at each facility for the student management system and teacher grade books has allowed greater storage capacity.

The Blue Springs School District technology infrastructure includes a fiber network provided through partnership with Comcast and purchased services from AT&T that connects the buildings within the district and enables all computers to have access to Internet resources. The Frame-Relay network was replaced where possible by fiber connections provided by the local cable company in cooperation with the city of Blue Springs. The teacher and student domains are separate facilities that allow secure data storage for both. Each student within the district should have a location on district servers for data storage that they can access at any place within the school building. Teachers are provided both departmental and private storage facilities that are part of a protected environment.

Instructional Equipment:

1. **Classroom configuration:** 1 networked multimedia computer with standard software for teacher utility and presentation, internet access and projection devices for classrooms in the form of LCD projectors or monitors with scan converters. Windows XP Professional units. Replacement cycle is 3 years on the teacher workstations. Each

teacher received a new workstation in 2005. This configuration needs to be expanded to provide uniformity across the district.

2. **Student Lab configurations:** 25-30 multimedia machines with software available both on-line and installed for instructional use in addition to library and resource subscriptions for accessing and searching for information. Each of the 22 buildings in the district have at least one complete lab and middle schools have at least 3 lab areas. All high school facilities have at least 4 lab settings with some mini-labs created within classrooms for student use. There is a demand for additional lab time for all students. Additional labs should be installed in all buildings or move towards assimilating the labs into the classrooms.

In addition the following are in place at various locations throughout the district:

- Wireless environments –Five elementary, both senior high schools.
- Portable Computer Carts
- Video production studios –Both senior high schools, one middle school and one elementary
- Smart / Team boards and projection devices – Elementary school, Middle school and High school
- Other Equipment: Scanners, digital cameras, laptops, AlphaSmart Keyboards, digital video cameras, camcorders, and multimedia projectors and Phonic Ears.
- Printers – all buildings have Konica networked printers with high-speed printing, collating, stapling, folding and binding capabilities. In addition, grade level and area network and stand-alone printers are supported through out the district.

Examples of Teaching, Learning, and Administrative Software:

Varies by building and level.

- Office 2003 Professional
 - Word
 - Access
 - Publisher
 - PowerPoint
 - Excel
 - Outlook
- Scholastic Reading Inventory
- MoreNet Online Resources
- United Streaming Digital Video Library
- Athena Library Automation System
- Mavis Beacon
- Plato Pathways
- Adobe Illustrator / Photoshop
- Scholastic Read 180
- Microsoft Exchange
- SASI Integrate Pro Grading Program
- Student Information System (SASI)
- Ways to Assess
- Ways to Success
- Reading Counts
- PhotoStory
- Inspiration
- Glenco Life Science
- CAD – Project Lead The Way
- CPS – eInstruction
- MicroType Pro
- Ainsworth Keyboarding
- BoardMaker
- Macromedia Captivate
- Macromedia Breeze Training
- Microsoft Project
- ACTive Prep
- Type to Learn
- KnowZone
- Reading Fluency Coach
- NovaNet
- Accounting
- Ecurriculum
- Parent Connect
- Discovery PlanIt
- Adobe Creative Suite

Internet Access: This is purchased through AT&T, Comcast and MoreNet. Internet Access is supported by eight T1 lines emanating from the district, individual cable access points at various schools and MoreNet access distributed from the District Central Office. All classroom and lab computers have internet access.

TFA 5: Technology Support

The technical support for staff and student technology is a three-tiered approach that includes:

1. Direct telephone support for staff and administration in the initiation and maintenance of both existing technological tools and throughout the addition of new technology.
2. A formal work order request and tracking system, ITDirect from SchoolDude.com was implemented. This system manages incidents related to computers, audio visual and telecommunications equipment. It enables requesters to submit technology requests and check request status online. Also included are built in inventory and total cost of ownership tools.
3. On site teacher specialists that deal with both software and hardware issues as they arise and are dedicated to particular facilities. These staff members have their own internal and external communication system within a building to assure prompt responses.
4. On site training for staff and students is provided with the implementation of new technology. This includes opportunities for training by other staff and specialists as needed to assure productivity and optimal use of technological tools. Retraining opportunities are also available as needed.

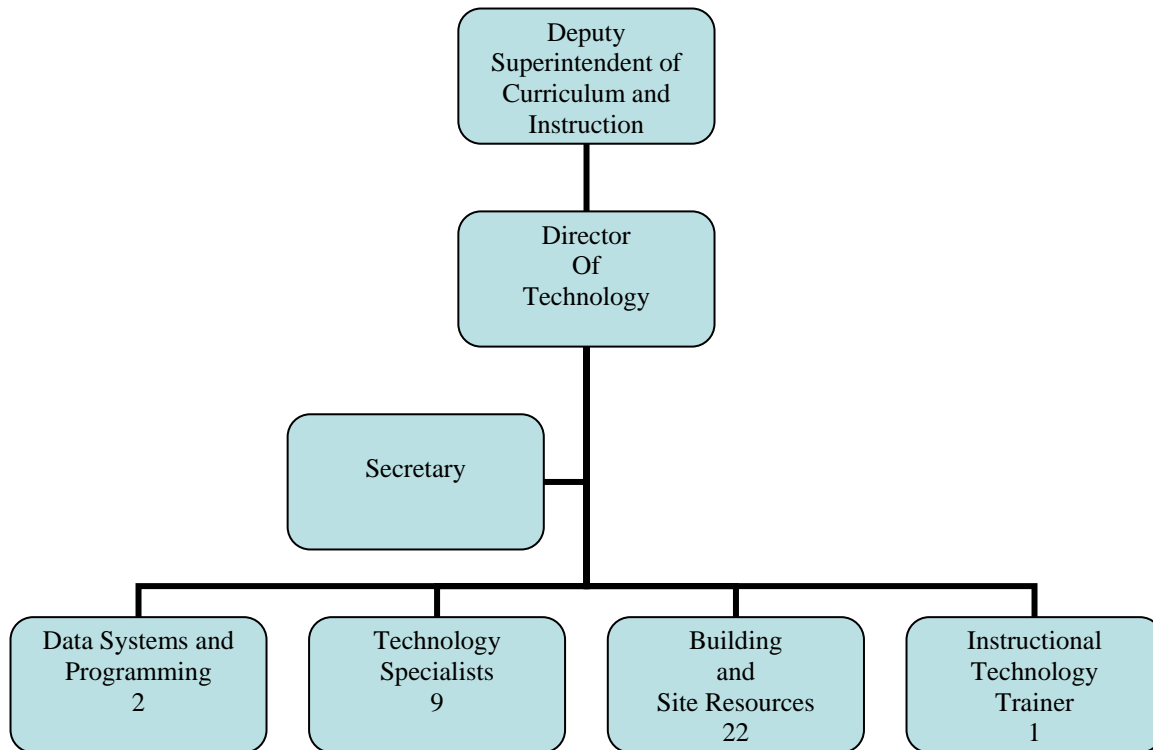
Work-Order Reports:

The number of reports successfully closed by the Technology Department:

2000-2001	3706
2001-2002	4040
2002-2003	4497
2003-2004	5463
2004-2005	5847
2005-2006	7812

Since the introduction of the formal job request system, SchoolDude.com, in January, 2006 a more accurate accounting of the job requests made is now possible. The new system has provided information that the actual job requests are averaging about 65 per school day. This has resulted in a yearly total close to 9,000 job requests. SchoolDude.com states that the average number of requests for a district of 15,000 students is approximately four per student per year or 60,000 requests. The average number of requests for a district of 3,000 students is only one request per student per year or 3,000 requests. As the size of the district enrollment increases so does the use of technology and the types of technology supported increase. A typical job request can range from “I can’t print” to “Please install this software on all computers in all labs.”

Technology Support Staff



Technology Department Organizational Chart

The current status is 9 technical support persons for 3271 computing devices or a ratio of 1 technical support person for every 363 devices.

The Missouri Education Technology Plan for 2006 – 2011 requires one technical support person for every 300 computing devices. The requirement is one technical person for every 150 laptop computers.

Currently we have two Direct Telephone support technicians for SASI.

The new Missouri Education Technology Plan requires the addition of a Network Engineer. We are in the process of adding a Network Engineer position.

The teaching staff has requested additional technological training to incorporate the use of technology into their lesson plans and classroom activities. In the past the training in technology has focused on the operation of the technological tools afforded them. New

technologies have been introduced at a greater pace than the training opportunities for the new technologies. Our current method of training the teachers to use the technology has been to train one or two key people in each technology in a particular building. It was hoped that the trained individuals would then train the other teachers. This has proven to be ineffective for a number of reasons including but not limited to:

- A lack of time,
- Reluctance to commit to new untried methodologies
- Lack of incentive to take training
- Original teacher's training was not adequate
- After the first round of training there is no method of follow up
- No support avenues to address possible problems or questions
- No training for legacy devices or software

To address this issue we plan to adopt a more formal system by establishing a District level Instructional Technology Department as a replacement for the one Instructional Technology Trainer. This department will:

- Create a library of technology resources for each grade level
- Provide training to teachers focused on integrating technology into the classroom
- Provide training on upgrades to existing software
- Evaluate the effectiveness of existing district software
- Evaluate new software programs
 - For effective education
 - Work with Network Engineer for compatibility with infrastructure
- Conduct or oversee summer offerings of technology courses

- Set training standards and policies
 - For certified, classified and administrative positions
 - Conduct skill level assessment for certified, classified and administrative positions
- Communicate technology policies to faculty
- Capture and utilize the best practices curriculum related programs the teachers are creating and distribute throughout the district.

The leader of the newly established Instructional Technology Department should be at the Director level reporting to the Assistant Superintendent of Curriculum. This person will provide the vision and leadership for the district's acquisition and use of technology for instruction and manage the district's Instructional Technology team.

The Instructional Technology team shall consist of:

- One full time qualified support person per Elementary School and one for each 50 teachers in higher level schools.
- To meet the Missouri Education Technology Strategic Plan proposed requirements for 2006 – 2011 this support person should be an experienced certified teacher with technology integration experience.
- The district will move towards replacing present teacher technicians with a full time permanently assigned Instructional Technology support person per building.

Technology Funding:

2006-2007: \$1,600,000 - Services, training, Supplies, Materials, Software, and Equipment.

Replacement Cycle Costs:

Three year cycle: \$512,000 based on 1200 teacher computers. Under consideration is 3 year staggered cycle on lab replacement.

Budgetary Priorities: for fiscal year 2007

Elementary

1. Increased training for integrating technology into classroom
2. Training for new teachers on Email, Grade Cards, and SASI
3. Lab upgrades
4. Network upgrades
5. Increase the number of computers
6. Update/purchase software
7. Projection devices
8. Telephone access

Secondary

1. Increased training for integrating technology into classroom
2. Training for new teachers on Email, Grade Cards, and SASI
3. File storage
4. Network upgrades
5. Rotational replacement of lab computers
6. Increase mini-labs

7. Increase remediation software
8. Telephone access

District-Wide

1. Training for support of network infrastructure
2. Shipping, receiving, repair and storage areas
3. Intranet

Professional Development

On going training will be funded to keep pace with new applications and technologies. Professional Development will empower the current support staff with the tools needed to diagnose and repair more complex issues. It will also allow for better evaluation and comparison of capabilities among all support staff.

Review of 2004 – 2007 Action Plan

Review of 2004 – 2007 Action Plan

TFA: 1 - Student Learning

Goal: Students will improve achievement with the assistance of technological tools.

MSIP: 9.1

CSIP: Goal 1; Goal 2; Goal 4

Objectives and Action Plans:

1.1 Implement a pilot program to evaluate the effectiveness of technology in improving student achievement (Data Analysis 1.1)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. Implement a web-based, automatically scored communication arts constructed response program for all 9 th grade students.	Improvement of student scores in the area of communication arts.	Through pre-and post test analysis of the data provided by the software.	A web-based program was implemented. Subsequent evaluation of the software’s effectiveness led to the discontinuance of the program.
2. Implement a software program for students to prepare for the ACT	Student scores will increase with guided practice	Average ACT scores will increase for students in the district	Classes using lab based software have been made available to students.
3. Implement a wireless laptop lab at each level with instructional software for student learning.	Student scores on district and state assessments will increase	MAP test analysis, District Wide Assessment analysis	

REVIEW OF 2004 – 2007 ACTION PLAN

1.2 Study and increase student learning opportunities that prepare them for future employment. (Data analysis 1.2, MSIP 9.4, CSIP Goal 4)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. Evaluate the enrollment in all vocational classes	Disaggregate data of the enrollment in vocational courses	Clear understanding of the courses and student needs.	Evaluation of data indicated a need for increased enrollment.
2. Increase awareness about the wide-variety of vocational training offered throughout the district	Increase contact and promotional material distributed in a variety of methods including email, website and news	A survey given to parents and students will indicate that a greater number understand the options and see them as beneficial. Increased enrollment in vocational courses.	Counselors have received training in promoting the newly adopted program, Project Lead The Way.
3. Increase enrollment in vocational courses	Number of students enrolled in vocational courses will increase.	Evaluating enrollment trends over the next three years.	PLTW has been implemented at the Freshman level. Levels of enrollment are increasing.

1.3 Integrate technology into classroom instructional practice for the benefit of student learning. (Data analysis 1.1, 1.4, MSIP 6.1.2, 6.1.3,6.4 Show-Me Standards 1.4, 2.7, SC8 SS7)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. Establish mobile projection centers for teachers to use in the classroom.	All teachers throughout the district will have access to projection devices and will utilize this.	All building will have access to projection centers for use in the classroom.	Mobile projector systems are available for general use. 247 classrooms are now permanently equipped with projectors.
2. Use technology for teachers to determine students’ reading level as a tool to remediate and enrich.	All students throughout the district will have a lexile level for baseline data and teachers will be able to use this for instructional strategies.	A score will be entered for each student within the student management system indicating all have been assessed.	SRI and Read 180 have been implemented in the district.

REVIEW OF 2004 – 2007 ACTION PLAN

1.4 Maintain the learning environment for students that include technological tools. (Data Analysis 1.4, 1.5, MSIP 6.2, 6.3, 6.4.1, 6.7, CSIP Goal 1.2, 1.11, 2.2)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. Maintain the instructional tools including software for teachers to use as an instructional device	The tools for teacher instructional purposes will continue to be fully functional	To be determined by work order turn-around time and teacher survey of technology department response time	SchoolDude’s ITDirect web-based work order request system was implemented district wide.
2. Provide safe-appropriate Internet access for students.	Students will have the ability to use internet tools in a safe and controlled environment	Student and teacher surveys as well as filtering reports	Appropriate filtering tools are used and updated to remain current.
3. Maintain ethical use of computer resources	Students and teachers will use technology resources for appropriate learning and instructional purposes	Technology Acceptable Use Policy for all students and teachers signed and on file.	Policy in place and signed as part of registration.

REVIEW OF 2004 – 2007 ACTION PLAN

TFA: 2 – Teacher Preparation and Delivery of Instruction: Data analysis, Objectives, Action Plans

Goal: Teachers will utilize technology to deliver effective classroom instruction with the assistance of professional development and technological tools and support.

MSIP: 6.4.3, 6.7

CSIP: Goal 1; Goal 2; Goal 4

Objectives and Action Plans:

2.1 The District will define the necessary technology training and support for staff (Data Analysis 2.3, 2.4, 2.5).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will develop a technology-training plan for staff.	The district will define what skills all teachers should have to use technology in the classroom.	A training plan will be in place for the district to use in the area of technology.	Technical Institute and Pulse online training has been made available to staff. A definition of minimum levels needs to be established.
2. The district will define the necessary skills all staff needs to use technology effectively.	All staff will understand what technology skills are needed for their job	Increase of reported abilities on technology survey and professional development survey.	A definition of minimum levels needs to be established.

REVIEW OF 2004 – 2007 ACTION PLAN

2.2 Provide training in the use of educational technology to staff to assure proper integration into classroom practice. (Data Analysis 1.1, 1.2, 1.3, 1.4 MSIP 6.4.3, 6.7.1 CSIP 1.11)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. District will provide training for teachers for newly adopted grade book software	Teachers will become comfortable with the new grade book program and will use it to maintain student grading records	All teachers that use academic grades will have a functioning grade book stored on the school server	IGPro classes held and Pulse online training made available.
2. The District will provide training in the use of the electronic classroom attendance program	Teachers will understand how to use the program to take daily attendance	All teachers will use the ClassXP program to take attendance.	ClassXP program installed on all teacher workstations.
3. The District will provide training in the use of video streaming in the classroom	Teachers will use the UnitedStreaming Web-based video library as an instructional tool with students in the classroom	Downloading and use logs provided by UnitedStreaming will indicate all buildings are using this resource.	In-services provided by UnitedStreaming for users. All buildings using this resource.
4. The District will provide training in the integration of technology in the classroom.	Teachers will have the confidence to use technology in their classroom for instructional purposes.	Increases in the integration of technology as seen in technology department survey and MSIP AQ survey results.	Technical Institute implemented to provide classes and credit courses for the integration of technology.

REVIEW OF 2004 – 2007 ACTION PLAN

2.3 Improve teacher, administrator, and staff support (Data Analysis 2.3, MSIP AQ FAC_S643).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will provide each building with technology training in troubleshooting common problems.	All buildings will have increased ability to deal with common non-technical issues related to technology	Decrease in the number of technology work orders for rebooting, and other common problems.	Technical Institute, on site Teacher Techs have held in-services for common problems. Pulse, online training made available.
2. The District will establish a representative for technology related issues at each building for staff support.	All building will have a person assigned to the technology committee that has further training in technology issues.	Increase in support for technology as seen in the technology department annual survey.	Teacher Techs were recruited for each building and given training for common basic problem solving.

REVIEW OF 2004 – 2007 ACTION PLAN

TFA: 3 – Administration, Data Management, and Communication: Data Analysis, Objectives, Action Plans

Goal: The District will implement applications to improve efficiency, staff productivity, and communication among members.

MSIP: 6.2, 6.3, 6.5, 6.7, 6.8, 7.3, 10.0, 10.1

CSIP: Goal 1; Goal 2; Goal 3, Goal 4.

3.1 The District will improve the quality of the data in the student management system (Data Analysis 3.1).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will develop and provide data manuals for cleaning-up student data within the new system.	All buildings will have the necessary information to correct and add data into the student management system	Buildings will have clean, maintained data in the student management system.	SASI, student management system implemented.
2. The District will provide stipends for staff at the secondary level to clean-up student transcripts and other information necessary at that level.	All data will be correct and student transcripts will reflect student course work.	All students will have corrected information in the area of transcripts at the secondary level.	Was accomplished in the summer of 2004

REVIEW OF 2004 – 2007 ACTION PLAN

3.2. The District will provide the necessary training for staff to utilize the tools of student data management (Data Analysis 3.2, 3.3, 3.4).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will provide continued teacher training and support for the student data management aspects that teachers use including the grade book, attendance applications and parent communication features	All teachers will use the grade book and attendance programs that have been implemented.	All teachers will have a fully functioning grade book within the district and will take attendance using the electronic attendance program.	IGPro and ClassXP installed on all teacher work stations.
2. The District will provide continued training in the use of the student management system for office and administrative staff.	All schools will use the management system for student information to its fullest	Yearly examination of data within the management system will reflect appropriate and optimal use.	Continued staff training program with SASI. Increased the number of staff for telephone support for SASI.

3.3. The District will provide additional resources for staff in the area of data storage and communication Data Analysis 3.5, 3.6)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
The District will establish the ability for teachers to input scores from any location using a web-based system	Teachers will have the ability to enter scores from home into their grade book	All teachers will have secure access to their grade book for entering student scores	Contracted Positive Networks to provide remote access to the district desktops. Terminal Services also available.
The District will establish an Intranet for internal communication and storage	Staff will have the ability to access an Intranet of data and information that is safe and pertinent	All staff will have a common area for communication and storage of commonly used information	Curriculum Intranet established.

REVIEW OF 2004 – 2007 ACTION PLAN

3.4 The District will enhance the communication tools for parents and community members (Data Analysis 3.3, 3.4, 3.5, 3.6, 3.7, 3.8).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will establish a secure parent connection to teacher grade book files so they can view student assignment status and current grades.	Parents will be able to log on to a secure site and view student’s current grade status in all subject areas	Weekly updates to the web based grade viewer will be made for all buildings and usage logs will demonstrate the number of parent	Implemented Parent Connect.
2. The District will develop and maintain a web-based curriculum system for teachers to use.	Teachers will be able to access the curriculum and use the resources in a web-based system	All curriculum will be on-line for teacher use and easy updating.	Implemented E-Curriculum web based system.
3. The District will provide teacher and class pages for all staff on the district website.	All teachers will have a webpage to post current information and assignments on a class or teacher web-page.	All staff will have the ability to create and maintain a webpage for classroom instruction in a format that does not need html training.	Class pages created and online training available.
4. The District will continue to provide and enhance the information available through the website for communication purposes.	All buildings will have up-to-date information on their web-page and the district will continue to enhance their information tools on the web-site	Technology surveys and period checks of web-site information	E-Curriculum and Discovery PlanIt receiving continuing enhancements.

REVIEW OF 2004 – 2007 ACTION PLAN

TFA: 4 – Resource Distribution and Use: Data Analysis, Objectives, Action Plans

Goal: The District will provide technological resources to members of the Blue Springs learning community.

MSIP: 6.2, 6.3, 6.4, 6.5, 6.7, 6.8, 7.3, 10.0

CSIP: Goal 1; Goal 2; Goal 3, Goal 4.

4.1 The District will investigate, develop, and implement policy regarding technology funding and purchasing. (Data Analysis 1.1, 1.3, 1.4, 1.5)

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will investigate the restructuring of the technology replacement cycle through fiscal management.	District will have in place a plan for the replacement cycle and the best time-frame for this taking into consideration the cost and available funds.	The existence of a replacement schedule that is adhered to throughout the district	The district has entered into a 3 year lease and replacement cycle with Dell on all teacher workstations.
2. The District will investigate the cost of and advantages of fiber installation at all facilities.	District will have a cost outlined for converting all facilities to fiber.	The existence of a cost analysis for fiber implementation per building across the district.	Fiber has been installed and buildings have fiber speed access.
3. The District will develop a lease/purchase policy for the replacement of machines including those in the replacement cycle.	A total cost of ownership will be created for district machines and a lease or purchase plan will be in place for the replacement of technology assets	Lease and purchase agreements will be developed to be used with the replacement and initiation of lab machines and staff work stations.	Dell lease program established.
4. The District will investigate the cost of implementing a wireless lab at all facilities throughout the district.	A cost analysis will be developed for purchasing seventeen additional wireless labs.	Cost sheets for wireless labs for each building in the district.	Five elementary buildings have been remodeled and moved to dual wired and wireless capabilities. Some wireless labs have been established for evaluation.

REVIEW OF 2004 – 2007 ACTION PLAN

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
5. The District will create a purchasing policy for all schools regarding new technology	A procedure and policy will be in place that will assure the greatest value and quality of technology equipment with available funds for all facilities	Each building will have a purchasing policy and plan that will be revised annually for technology equipment	Policies are in place.

4.2 The District will add additional technology resources for staff and students (Data Analysis 4.1, 4.4, 4.5).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will continue to provide teacher workstations for all certificated staff throughout the district	Teachers will have desktop units for educational, communication, and data management purposes	100% of certificated staff will have a desktop machine	All certificated staff have desktop or laptop machines.
2. Elementary Library/Media Center technology labs will be increased and updated	Elementary students will have increased access to lab based technology	Each of the 13 elementary buildings will have labs of 30 updated machines for student use	SPE has 50, VSE has 50, WYE has 45, FSE has 45 LFE has 25 and 30 laptops 7 others have 25
3. Middle and high school Library/Media Center technology labs will be updated to meet the needs of students and staff	Students will have access to the necessary technology resources for student learning	All labs will be maintained with modern, technologically advanced equipment for student and staff use.	Leased machines in Middle School Media Center
4. The district will continue to investigate and add technological resources for the Library/Media Center	Students will have access to the necessary media and technology resources for student learning	All labs will be maintained with modern, technologically advanced software and search tools for student and staff use	Media Center labs have been upgraded.

REVIEW OF 2004 – 2007 ACTION PLAN

TFA: 5 – Technical Support

Goal: The District will improve technical support and assistance for staff members.

MSIP: 6.2, 6.3, 6.4, 6.7

CSIP: 1.2, 1.3, 1.5, 1.14

5.1 The District will increase the technological support for staff (Data Analysis 5.1, 5.2).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will hire additional technology support staff	Greater efficiency dealing with technology work requests and the integration of new technology	The ratio of staff to computers will decrease	Two additional staff members hired.
2. The District will reallocate staff to meet the technology support needs of the staff.	Staff will have the benefit of greater telephone support and on-site training	Staff will have a dedicated position to telephone support as well as an instructional technology trainer	Instructional Technology coach position established.

5.2 The District will investigate funding structures and technological support systems (Data Analysis 5.3, 5.4).

Action Step/Activity	Progress Expected	Progress Measured	Objective Met?
1. The District will investigate grant and technology partnerships to supplement funding in technology and support	Additional funds may be available or partnerships developed that would allow for greater resources and services to be available	Possible grants identified and technology partnership plans from other districts and businesses evaluated	Ongoing.
2. The District will investigate establishing building technical assistants that would be trained and receive a yearly stipend	The District will determine if it is advantageous to establish an internal technical assistance structure at each building as a first tier for technical issues.	A cost and benefit analysis will be created for the addition of technology support staff at each building.	Teacher Tech for each building established with yearly stipend.

Blue Springs School District Technology Goals, 2007 - 2010

TFA 1: Student Learning

Students will improve achievement with the assistance of technological tools.

CSIP Goal 1.1,1.4,1.6,1.7, 1.9, 1.10,1.11,1.13,1.14, 2.2, 2.4, 3.3 4.1, 4.2, 4.5, 4.6, 4.9
MSIP Standard Indicator 7.4, 7.5, 6.2,6.3, 6.4, 6.5, 6.7, 6.8, 7.3, 10.0

TFA 2: Teacher Preparation

Teachers will utilize technology to deliver effective classroom instruction with the assistance of professional development and technological tools and support.

CSIP Goal 1.3, 1.5, 1.6, 1.7, 1.8, 1.11, 1.14, 2.1, 2.2, 2.3, 3.2
MSIP Standard Indicator 6.2, 6.3, 6.4, 6.7, 6.8, 10.1

TFA 3: Administration/data management/communication processes

The District will implement applications to improve efficiency, staff productivity, and communication among members.

CSIP Goal 1.1, 1.3, 1.8, 1.9, 1.11, 1.16, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 4.3, 4.4, 4.6, 4.9
MSIP Standard Indicator 6.2, 6.3, 6.5, 6.7, 6.8, 7.3, 10.0, 10.1,

TFA 4: Resource distribution and use

The District will provide the necessary technological resources to members of the Blue Springs learning community.

CSIP Goal 1.2, 1.4, 1.7, 1.10, 1.11, 1.13, 1.14, 2.2, 2.4, 3.3, 4.9
MSIP Standard Indicator 6.2, 6.3, 6.4, 6.5, 6.7, 6.8, 7.3, 10.0

TFA 5: Technical support

The District will improve technical support and assistance for staff members.

CSIP 1.2, 1.3, 1.5, 1.14
MSIP 6.2, 6.3, 6.4, 6.7

2007 – 2010 Action Plan

**Blue Springs School District
Data Analysis, Objectives, and Action Plans 2007 -2010**

TFA: 1 - Student Learning

Goal: Students will improve achievement with the assistance of technological tools.

MSIP: 9.1

CSIP: Goal 1; Goal 2; Goal 4

Data Examined	Status	Results	Implications for the District
1. Student Achievement: MAP, PLAN, ACT	Strength Communication Arts weaknesses shown	The district can make no conclusive causal relationship between student achievement and technology use.	Utilize technology resources that enhance student learning and document with empirical data for further analysis CSIP - MSIP
2. Student post-high school preparation: graduation survey	Strength/Improve	Students were fairly positive about their training as it related to job skills but many did not take advantage of the vocational opportunities in the district	The enrollment in the vocational programs and classes across the district needs to increase.
3. Student Technology Survey MSIP SEC_48, PRT_29	Strength/Maintain	Students understand how to use technology tools and on-line resources	Continue to offer courses and learning opportunities integrated with curriculum for technology use.
4. Surveys of Technology MSIP PRT_40, PRT_29, PRT 25, FAC_24	Moderate Strength/ Increase	Students, Parents, and Teachers feel they have the technological tools to enhance learning	Continue to provide more and better tools for student learning.
5. Surveys of Technology	Improve	Teachers feel they could benefit from more training for integrating technology into the curriculum	Maximize benefits of technology to enhance student learning.

Following the review of the above data an action plan and objectives were established.

Objectives and Action Plans:

1.1 Implement a pilot program to evaluate the effectiveness of technology in improving student achievement

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will align and sequence the integration of technology with the National Education Technology Standards (NETS) for student performance indicators.	2007 - 2010	Annually	Deputy Super. Curriculum, Director of Instructional Technology		Curriculum Budget	A progressive use of technology by students	Evaluate student performance at 5 th , 8 th , and 12 th grade levels. Use assessment tools for NETS standards.
2. The Instructional Tech Dept. will develop procedures and guidelines for purchasing and evaluating instructional software.	2007 - 2010	Annually	Director of Instruct. Tech.		Curriculum Budget	Resources will be diverted to more effective instructional software. Student scores will increase.	District software resources will be compared to known lists of effective software.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
3. Individual student identity, logins, and storage areas will continue to be provided for students at the appropriate grade levels.	2007 - 2010	Annually	Director of Technology		Technology Budget	Students will have technology resources available to them. These services will be expanded as it becomes appropriate at lower grade levels.	Storage usage history logs.
4. Continue offering software program for students to prepare for the ACT	2007 - 2010	Annually	Director of Secondary Education	\$950.00	Curriculum Budget	Student scores will increase with guided practice	Average ACT scores will increase for students in the district
5. Implement additional wireless laptop labs at each level with instructional software for student learning.	2007 - 2010	Annually	Director of Technology and Deputy Super. of Curriculum	\$50,000 per level	Primetime funds, and Grants	Student scores on district and state assessments will increase	MAP test analysis, District Wide Assessment analysis

1.2 Study and increase student learning opportunities that prepare them for future employment. (MSIP 9.4, CSIP Goal 4)

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. Continue evaluation of the enrollment in all vocational classes	2007 - 2010	Annually	Director Secondary Education	Included in regular instructional budget	Local, vocational, Vocational Grant	Disaggregate data of the enrollment in vocational courses	Clear understanding of the courses and student needs.
2. Continue to increase awareness about the wide-variety of vocational training offered throughout the district	2007 - 2010	Annually	Director Secondary Education	Included in regular instructional budget	Local, vocational, vocational grant	Increase contact and promotional material distributed in a variety of methods including email, website and news	A survey given to parents and students will indicate that a greater number understand the options and see them as beneficial. Increased enrollment in vocational courses.
3. Increase enrollment in vocational courses	2007 - 2010	Annually	Education	Included in regular instructional budget	Local, vocational, vocational grant	Number of students enrolled in vocational courses will increase.	Evaluating enrollment trends over the next three years.
4. Expand existing 9 th grade Project Lead The Way to the 10 th and 11 th grade level.	2007-2008	Annually	Secondary Education	\$230,000	Local, Vocational, Vocational grant	Number of students enrolled in vocational courses will increase.	Evaluating enrollment trends over the next three years.

1.3 Integrate technology into classroom instructional practice for the benefit of student learning. (MSIP 6.1.2, 6.1.3,6.4 Show-Me Standards 1.4, 2.7, SC8 SS7)

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. Increase installation of projector and sound systems into the classrooms	2007-2012	Annually	Director of Technology	\$2560 per classroom	Local, state, and grant funds	All teachers throughout the district will have access to projection devices.	Measured by the number of classrooms having projector and sound systems.
2. Increase installation of Classroom Performance Systems into the classrooms	2007 - 2010	Annually	Deputy Super Curriculum	\$2000 per classroom	Local, State, and grand funds	Teachers will receive immediate feedback and tracking capabilities on students' understanding of subject matter	Measured by the number of classrooms having projector and sound systems.
3. Use technology for teachers to determine students' reading level as a tool to remediate and enrich.	2007 - 2010	Annually	Deputy Super Curriculum and Director of Technology	Included in regular instructional budget	Local, state, and grant funds	All students throughout the district will have a lexile level for baseline data and teachers will be able to use this for instructional strategies.	A score will be entered for each student within the student management system indicating all have been assessed.
4. Establish a Instructional Technology Department	2007	Annually	Deputy Super of Curriculum	\$60,000	Local and state funds.	Students will benefit from increased skill set of teachers.	Instructional Technology Department established

1.4 Maintain the learning environment for students that include technological tools. (MSIP 6.2, 6.3, 6.4.1, 6.7, CSIP Goal 1.2, 1.11, 2.2)

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. Maintain the instructional tools including software for teachers to use as an instructional device	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	The tools for teacher instructional purposes will continue to be fully functional	To be determined by work order turn-around time and teacher survey of technology department response time
2. Continue to provide safe-appropriate Internet access for students.	2007 - 2010	Annually	Directory of Technology Library/ Media Specialists	Included in regular instructional budget	Local and state	Students will have the ability to use internet tools in a safe and controlled environment	Student and teacher surveys as well as filtering reports
3. Maintain ethical use of computer resources	2007 - 2010	Annually	Director of Technology Building Level Principals	Included in regular instructional budget	Local and state	Students and teachers will use technology resources for appropriate learning and instructional purposes	Technology Acceptable Use Policy for all students and teachers signed and on file.

Blue Springs School District Data Analysis, Objectives, and Action Plans

TFA: 2 – Teacher Preparation and Delivery of Instruction

Goal: Teachers will utilize technology to deliver effective classroom instruction with the assistance of professional development and technological tools and support.

MSIP: 6.4.3, 6.7

CSIP: Goal 1; Goal 2; Goal 4

Data Examined	Status	Results	Implications for the District
1. Professional development survey	Strength/increase	Professional development is strong but needs more technological training	Provide more training for effective implementation of technology
2. MSIP Review AQ Report of Survey Results SEC _S643 PRT _ 29	Moderate Strength	75% of parents indicated that they felt their child used computers effectively at school while students were found to be at the 80 th percentile in familiarity with electronic tools and resources	The district must continue to provide the resources and the training for teachers to assist students in effective technology use.
3. Library Media Technology Surveys	Strength	Students and teachers felt that there were adequate lab facilities for instruction and research	Continue to provide resources and increase these as enrollment increases to maintain student and teacher access.

Following the review of the above data an action plan and objectives were established.

Objectives and Action Plans:

2.1 The District will define the necessary technology training and support for staff

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will establish a minimum level of technical skills for teachers.	2007	Annually	Director of Instruct Technology	Included in regular instructional budget	Local and State	The District will adopt the LoTi Levels of Technology Integration	An assessment instrument will be used to evaluate skill levels.
1. The District will develop a technology-training plan for staff.	2007 - 2010	Annually	Director of Instructional Technology	Included in regular instructional budget	Local and state	The District will base the training plan on staff assessment results and classroom observation.	A training plan will be in place for the district to use in the area of technology. Development opportunities and incentives will be provided.

2.2 Provide training in the use of educational technology to staff to assure proper integration into classroom practice. (MSIP 6.4.3, 6.7.1 CSIP 1.11)

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. District will provide training for teachers for grade book software	2007 - 2010	2007 - 2010	Director of Instructional Technology	Included in regular instructional budget	Local and state	Teachers will become comfortable with the grade book program and will use it to maintain student grading records	All teachers that use academic grades will have a functioning grade book stored on the school server
2. The District will provide training in the use of the electronic classroom attendance program	On going	Annually	Director of Instructional Technology Building Principals	Included in regular instructional budget	Local and state	Teachers will understand how to use the program to take daily attendance	All teachers will use the ClassXP program to take attendance.
3. The District will provide training in the integration of technology in the classroom.	2007 - 2010	Annually	Director of Instructional Technology	Included in regular instructional budget	Local and state	Teachers will have the confidence to use technology in their classroom for instructional purposes.	Increases in the integration of technology as seen in technology department survey and MSIP AQ survey results.

2.3 Improve teacher, administrator, and staff support (MSIP AQ FAC_S643).

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will provide online training modules as requested by staff.	2007 - 2010	Annually	Director of Instructional Technology	Included in regular instructional budget	Local and state	All staff members will have increased ability to deal with common non-technical issues related to technology	Decrease in the number of technology work orders.
2. The District will establish an instructional technology coach at each building for staff support.	2007 - 2010	Annually	Director of Instructional Technology	Included in regular instructional budget	Local and state	All buildings will have a certified instructional coach available	Increase in support for technology as seen in the technology department annual survey.

Blue Springs School District Data Analysis, Objectives, and Action Plans

TFA: 3 – Administration, Data Management, and Communication

Goal: The District will implement applications to improve efficiency, staff productivity, and communication among members.

MSIP: 6.2, 6.3, 6.5, 6.7, 6.8, 7.3, 10.0, 10.1

CSIP: Goal 1; Goal 2; Goal 3, Goal 4.

Data Examined	Status	Results	Implications for the District
1. Newly implemented student data management system for demographic, grade, attendance, health, schedule, and transportation information.	Strength/Improve	Fully integrated system for student data management with connections between all buildings and improved growth potential implemented 2003-2004 school year.	Data will be more meaningful but needs to be appended for full functionality.
2. Teacher use of new management system including attendance and grade books.	Weakness	Staff has become more comfortable with the new management system and the changes	Ongoing and more advanced training of staff in the use of the system and the benefits they will see is needed.
3. Accessibility of curriculum for staff	Weakness	Teachers have only paper copies of curriculum guides and are inefficient	Implement a web-based curriculum management tool for all teachers to use
4. Use of technology for communication among members, email and website	Strength/maintain	Staff has reliable and efficient communication in the form of email within the district	Continue to provide the resources for teachers such as email to communication among members
5. Communication tools for external communication with parents	Strength/Improve	Communication tools are available including email but classroom activities need to be communicated	Provide teachers a webpage to communicate classroom activities and assignments for parents and students.

Data Examined	Status	Results	Implications for the District
6. Communication for parents, and community members	Strength/Maintain	Website provides the necessary information about the district for parents and community members	Continue to provide information through a district website.

Following the review of the above data an action plan and objectives were established.

Objectives and Action Plans:

3.1 The District will improve the quality of the data in the student management system.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will develop and provide data manuals for student data entry within the new system.	2007	2007	Director of Technology	Included in regular instructional budget	Local and state	All buildings will have the necessary information to correct and add data into the student management system	Buildings will have clean, maintained data in the student management system.

3.2. The District will provide the necessary training for staff to utilize the tools of student data management

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will provide continued teacher training and support for the student data management aspects that teachers use including the grade book, attendance applications and parent communication features	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	All teachers will use the grade book and attendance programs that have been implemented.	All teachers will have a fully functioning grade book within the district and will take attendance using the electronic attendance program.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
2. The District will provide continued training in the use of the student management system for office and administrative staff.	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	All schools will use the management system for student information to its fullest	Yearly examination of data within the management system will reflect appropriate and optimal use.

3.3. The District will provide additional resources for staff in the area of data storage and communication

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will establish the ability for teachers to input scores from any location using a web-based system	2007 - 2010	2007	Director of Technology	Included in regular instructional budget	Local and state	Teachers will have the ability to enter scores from home into their grade book	All teachers will be trained on Positive Networks secure access to their grade book for entering student scores
2. The District will establish an Intranet for internal communication and storage	2007 - 2010	Annually	Director of Technology Asst. Super. Curriculum	Included in regular instructional budget	Local and state	Staff will have the ability to access an Intranet of data and information that is safe and pertinent	All staff will have a common area for communication and storage of commonly used information

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
3. The District will establish a minimum level of technical skills for Administrative Personnel.	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	Minimum standards and assessment will be developed for secretaries	Standards established and a baseline assessment of skills made.

3.4 The District will enhance the communication tools for parents and community members

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will establish a secure parent connection to teacher grade book files so they can view student assignment status and current grades.	2007 - 2010	Annually	Director of Technology Asst. Super of Curriculum	Included in regular instructional budget	Local and state	Parents will be able to log on to a secure site and view student's current grade status in all subject areas	Weekly updates to the web based grade viewer will be made for all buildings and usage logs will demonstrate the number of parent
2. The District will continue to maintain a web-based curriculum system for teachers to use.	2007 - 2010	Annually	Asst. Super of Curriculum Director of Technology	Included in regular instructional budget	Local and state	Teachers will be able to access the curriculum and use the resources in a web-based system	All curriculum is on-line for teacher use and easy updating.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
3. The District will provide teacher and class pages for all staff on the district website.	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	All teachers will have a webpage to post current information and assignments on a class or teacher web-page.	All staff will have the ability to create and maintain a webpage for classroom instruction in a format that does not need html training.
4. The District will continue to provide and enhance the information available through the website for communication purposes.	2007 - 2010	Annually	Director of Technology Asst. Super of Curriculum Building Principals	Included in regular instructional budget	Local and state	All buildings will have up-to-date information on their web-page and the district will continue to enhance their information tools on the web-site	Technology surveys and period checks of web-site information
5. Continued automation of the student registration process.	2007 - 2010	2007	Directory of Technology	Included in regular instructional budget	Local and state	Capture best practices and distribute district wide. Investigate a computerized method of registration.	A computerized method of registration is adopted.

Blue Springs School District Data Analysis, Objectives, and Action Plans

TFA: 4 – Resource Distribution and Use

Goal: The District will provide technological resources to members of the Blue Springs learning community.

MSIP: 6.2, 6.3, 6.4, 6.5, 6.7, 6.8, 7.3, 10.0

CSIP: Goal 1; Goal 2; Goal 3, Goal 4.

Data Examined	Status	Results	Implications for the District
1. Network Speed Analysis	Strength	WAN is a combination of leased fiber and a fiber network. Weak points in the infrastructure are switches that are not gigabit capable.	District connections between buildings are more than adequate for current technology. Switches need to be replaced.
2. Lease Agreements	Strength	Lease agreements have been established that include over 1200 machines that have proven to be cheaper and provide better support.	A rotation of lease agreements needs to be implemented to ease
3. Wireless technology project	Strength/Improve	Each of the district high schools and a pilot elementary has a wireless lab established that students can use and is successful	More wireless labs need to be implemented at the middle and elementary level
4. The District will re-evaluate the District wide minimum standard for each classroom. Each classroom needs to be brought up to a minimum standard	Improve	A wide range of technology levels exists between classrooms as technology has advanced.	Funding sources are not equitable from school to school.

Following the review of the above data an action plan and objectives were established.

Objectives and Action Plans:

4.1 The District will investigate, develop, and implement policy regarding technology funding and purchasing.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will investigate the restructuring of the technology replacement cycle through fiscal management.	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	District will have in place a plan for the replacement cycle and the best time-frame for this taking into consideration the cost and available funds.	The existence of a replacement schedule that is adhered to throughout the district
2. The District will investigate the cost of high speed switches and other infrastructural improvements	2007	2007	Director of Technology	Included in regular instructional budget	Local and state	District will have a cost outlined for needed improvements such as switches and backup servers	The existence of a cost analysis per building across the district.
3. The District will develop a lease/purchase policy for the replacement of machines including those in the replacement cycle.	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	Additional lease or purchase plans will be in place for the replacement of technology assets on an annual partial replacement basis.	Lease and purchase agreements will be developed to be used with the replacement and initiation of lab machines and staff work stations.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
4. The District will investigate the cost of implementing a wireless lab at all facilities throughout the district.	2007 - 2010	2007	Director of Technology	Included in regular instructional budget	Local and state	A cost analysis will be developed for purchasing seventeen additional wireless labs.	Cost sheets for wireless labs for each building in the district.
5. The District will create a purchasing policy for all schools regarding new technology	2007	Annually	Director of Technology	Included in regular instructional budget	Local and state	A procedure and policy will be in place that will assure the greatest value and quality of technology equipment with available funds for all facilities	Purchasing will be consolidated to improve the buying power of the District.

4.2 The District will add additional technology resources for staff and students

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will continue to provide teacher workstations for all certificated staff throughout the district	2007 - 2010	Annually	Director of Technology	Included in regular instructional budget	Local and state	Teachers will have desktop units for educational, communication, and data management purposes	100% of certificated staff will have a desktop machine

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
2. Elementary Library/Media Center technology labs will be increased and updated	2007 - 2010	Annually	Director of Technology Elementary Principals	Included in regular instructional budget	Local and state	Elementary students will have increased access to lab based technology	Each of the 13 elementary buildings will have labs of 30 updated machines for student use
3. Middle and high school Library/Media Center technology labs will be updated to meet the needs of students and staff	2007 - 2010	Annually	Director of Technology Building Principals	Included in regular instructional budget	Local and state	Students will have access to the necessary technology resources for student learning	All labs will be maintained with modern, technologically advanced equipment for student and staff use.
4. The district will continue to investigate and add technological resources for the Library/Media Center	2007 - 2010	Annually	Director of Technology Building Principals	Included in regular instructional budget	Local and state	Students will have access to the necessary media and technology resources for student learning	All labs will be maintained with modern, technologically advanced software and search tools for student and staff use

Blue Springs School District Data Analysis, Objectives, and Action Plans

TFA: 5 – Technical Support

Goal: The District will improve technical support and assistance for staff members.

MSIP: 6.2, 6.3, 6.4, 6.7

CSIP: 1.2, 1.3, 1.5, 1.14

Data Examined	Status	Results	Implications for the District
1. Technical support structure	Strength/Improve	The District has the structure to implement efficient and effective support services but staff additions are necessary	Hire additional technicians to serve building level support and central support needs.
2. Work Order Reports	Improve	The district has successfully processed at least 9000 reports annually	Provide the necessary personnel to deal with the work order requests in a more timely manner
3. Technology funding	Weakness	The District has experiences budget cut-backs that have impacted technology goals. No increase in technology budget for seven years.	Investigate funding resources for technology tools and reallocate existing funds for optimal use
4. Faculty surveys	Improve	The District needs to provide greater assistance to faculty to integrate instructional technology into the classroom	A new Instructional Technology department needs to be created.

Following the review of the above data an action plan and objectives were established.

Objectives and Action Plans:

5.2 The District will increase the technological support for staff.

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will hire additional technology support staff	2007 - 2010	Annually	Director of Technology	\$37,440	District Budget	Greater efficiency dealing with technology work requests and the integration of new technology	The ratio of staff to computers will decrease
2. The District will reallocate staff to meet the technology support needs of the staff.	2007 - 2010	Annually	Director of Technology Asst Super of Curriculum	\$30,450	District Budget	Staff will have the benefit of greater telephone support and on-site training	Staff will have a dedicated position to telephone support as well as an instructional technology trainer

5.3 The District will investigate funding structures and technological support systems

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
1. The District will investigate grant and technology partnerships to supplement funding in technology and support	2007 - 2010	Annually	Director of Technology Asst. Super Curriculum	No additional cost	N/A	Additional funds may be available or partnerships developed that would allow for greater resources and services to be available	Possible grants identified and technology partnership plans from other districts and businesses evaluated

Action Step/Activity	Timeline	Review Dates	Responsible	Estimated Cost	Funding Source	Progress Expected	Progress Measured
2. The District will begin the process of establishing an Instructional Technology Department	2007 - 2010	2007	Director of Instructional Technology Deputy Super of Curriculum	\$70,000	N/A	The District will establish an Instructional Technology Department	A Director of Instructional Technology will be appointed and plans for building level support in place
3. The District will add a Network Engineer Position	2007	2007	Director of Technology	\$60,000	District Budget	Smoothen running network with adherence to normal operating standards.	A Network Engineer will be hired.
4. The District will begin a formal certification training program for Technology Specialists	2007	2007	Director of Technology	\$15,000 annually	District Budget	Better trained and cross trained Technology Specialists	Specialists will make progress towards certification.

Communication/Dissemination, Monitoring and Evaluation

Communication/Dissemination:

The Blue Springs School District Technology Plan will be made available in electronic form on the District Intranet online training system. Board Members will receive paper and electronic copies. These forms of posting will be updated as progress towards the stated goals is made and integrated into the C-SIP plan.

Monitoring and Evaluation:

Our Technology Committees meet on a regular basis. Presentations are made giving updated information of the status of technology issues, questions answered and future plans evaluated. Building Level Technology Committees help guide the progress at the building level.

Appendix A: Levels of Technology Implementation (LOTI) Framework

Level 0 Nonuse - A perceived lack of access to technology-based tools or a lack of time to pursue electronic technology implementation. Existing technology is predominately text-based (e.g., ditto sheets, chalkboard, overhead projector).

Classroom Observations: There is no visible evidence of computer access in the classroom or computers sit idle during the instructional day.

Teacher Comments:

“I really don’t have the time to deal with computers anyway.”

“My computer crashed and burned on me a few years ago. I’m still waiting for someone to fix it.”

“Using computer is the least of my problems this semester. Seen the new TAKS?”

Level 1 Awareness - The use of computers is generally one step removed from the classroom teacher (e.g., it occurs in integrated learning system labs (i.e. Jostens, CCC, IDEAL, Plato), special computer-based pull-out programs, computer literacy classes, and central word processing labs). Computer based applications have little or no relevance to the individual teacher's instructional program.

Classroom Observations: Available classroom computer(s) are used exclusively for teacher productivity. Multimedia applications are used to embellish classroom lectures/teacher presentations. Curriculum Management tools are used extensively to generate standards-driven lesson plans.

Teacher Comments:

“I basically send my kids to the computer lab where they learn how to use it. The kids love it.”

“My students go to the lab each Tuesday. This frees me to catch up on my grades or meet with parents.”

“Our staff attends a bimonthly computer camp with our technology coordinator. This month we’re learning how to design a web page.’

Level 2 Exploration - Technology based tools serve as a supplement (e.g., tutorials, educational games, simulations) to the existing instructional program. The electronic technology is employed either for extension activities or for enrichment exercises to the instructional program.

Classroom Observations: Student projects (e.g., designing web pages, research via the Web, creating multimedia presentations, creating graphs and charts) focus on lower levels of Bloom’s Taxonomy (e.g. creating a web page to learn more about whale species). Greater emphasis on technology rather than critical content. Computer use

serves as a reward or digital babysitter. Students gather weather data and keyboarding the information in a WAN database (e.g. GLOBE project).

Teacher Comments:

“My students have built some very sophisticated and impressive multimedia application during the year. Some of their projects even look professional.”

“When students finish their packets early, they often go back to the computers and practice their computer skills.”

“My students created our school’s web page.”

“My kids graphed some data. They love the way the graphs look on the screen.”

Level 3 Infusion - Technology based tools including databases, spreadsheets, graphing packages, probes, calculators, multimedia applications, desktop publishing, and telecommunications augment selected instructional events (e.g., science kit experiments using spreadsheets or graphs to analyze results, telecommunications activities involving data sharing among schools).

Classroom Observations: Students use tool-based applications such as spreadsheets/graphing, concept mapping, and databases are used primarily for analyzing data, making inferences, drawing conclusions from an investigation or related scientific inquiry. Students use the web for research purposes or interact with selected software applications that require them to take a position or role play an issue.

Teacher Comments:

“My students just completed a research project investigating why many middle school students never use the school’s drinking fountains.”

“I designed a culminating performance task for my 4th grade students that required them to conduct web-based research and related data gathering to support their predictions for the upcoming election.”

“My students created a multimedia presentation that analyzed the issue of poverty among 18-25 year old adults.”

Level 4a Integration (mechanical) - Technology based tools are mechanically integrated, providing a rich context for students' understanding of the pertinent concepts, themes, and processes. Heavy reliance is placed on prepackaged materials and sequential charts that aid the teacher in the daily operation of the instructional curriculum.

Technology (e.g., multimedia, telecommunications, databases, spreadsheets, word processing) is perceived as a tool to identify and solve authentic problems relating to an overall theme or concept.

Classroom Observations: Students designed a school-based information kiosk to assist their classmates with various “safety” issues including map directions based on time of day, neighborhood watch sites, and “just-say-no” strategies to use with strangers. The information collected for the kiosk was supplied from student generated surveys, field investigations, and personal interviews.

Teacher Comments:

“The creation of the information kiosk idea was based on an existing unit that I borrowed from one of the 5th grade teachers.”

“I used an existing unit design published by a software company that provided an easy way to design my culminating performance task and the student experiences leading up to the fund raiser.”

Level 4b Integration (routine) - Teachers can readily create integrated units with little intervention from outside resources. Technology-based tools are easily and routinely integrated, providing a rich context for students' understanding of the pertinent concepts, themes, and processes. Technology (e.g., multimedia, telecommunications, databases, spreadsheets, word processing) is perceived as a tool to identify and solve authentic problems relating to an overall theme/concept.

Classroom Observations:

- Based on the rise in student violence on campus, students prepared a multimedia presentation highlighting their recommended mediation strategies using data synthesized from school-wide surveys and from the Internet.
- Students created a web site devoted to exploring solutions to the steady increase in solid wastes entering the local landfill.
- Students prepared a multimedia presentation highlighting the misconceptions and omissions in history textbooks concerning the contributions of their specific ethnic group. Presentation was later burn onto a CD for submission to various textbook publishers for consideration.

Teacher Comments:

- “Our student mediation unit was prompted by the recent rise in fights on campus. Many students expressed concern for their personal safety and the safety of others at school.”
- “I first converted several digital images into a PowerPoint presentation to get my students thinking about the waste disposal issue and asking questions.

Level 5 Expansion - Technology access is extended beyond the classroom.

Classroom teachers actively elicit technology applications and networking from business enterprises, governmental agencies (e.g., contacting NASA to establish a link to an orbiting space shuttle through the Internet), research institutions, and universities to expand student experiences directed at problem solving, issues resolution, and student activism surrounding a major theme or concept.

Level 6 Refinement - Technology is perceived as a process, product (e.g. invention, patent, new software designed), and tool for students to use in solving authentic problems related to an identified real-world problem or issue. In this context, technology provides a seamless medium for information queries, problem-solving, and product development. Students have read access to and a complete understanding of a vast array of technology-based tools to accomplish any particular task.

Appendix B:

National Educational Technology Standards for Teachers

1 TECHNOLOGY OPERATIONS AND CONCEPTS.

Teachers demonstrate a sound understanding of technology operations and concepts.

Teachers:

- demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students)
- demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

2 PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- apply current research on teaching and learning with technology when planning learning environments and experiences.
- identify and locate technology resources and evaluate them for accuracy and suitability.
- plan for the management of technology resources within the context of learning activities.
- plan strategies to manage student learning in a technology-enhanced environment.

3 TEACHING, LEARNING, AND THE CURRICULUM.

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- facilitate technology-enhanced experiences that address content standards and student technology standards.
- use technology to support learner-centered strategies that address the diverse needs of students.
- apply technology to develop students' higher order skills and creativity.
- manage student learning activities in a technology-enhanced environment.

4 ASSESSMENT AND EVALUATION.

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- apply technology in assessing student learning of subject matter using a variety of assessment techniques.

- use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

5 PRODUCTIVITY AND PROFESSIONAL PRACTICE.

Teachers use technology to enhance their productivity and professional practice.

Teachers:

- use technology resources to engage in ongoing professional development and lifelong learning.
- continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- apply technology to increase productivity.
- use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

6 SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. Teachers:

- model and teach legal and ethical practice related to technology use.
- apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- identify and use technology resources that affirm diversity
- promote safe and healthy use of technology resources.
- facilitate equitable access to technology resources for all students.

Appendix C:

Technology Standards for School Administrators Framework, Standards, and Performance Indicators

Leadership and Vision – Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.

Educational leaders:

- a. facilitate the shared development by all stakeholders of a vision for technology use and widely communicate that vision.
- b. maintain an inclusive and cohesive process to develop, implement, and monitor a dynamic, long-range, and systemic technology plan to achieve the vision.
- c. foster and nurture a culture of responsible risk-taking and advocate policies promoting continuous innovation with technology.
- d. use data in making leadership decisions.
- e. advocate for research-based effective practices in use of technology.
- f. advocate on the state and national levels for policies, programs, and funding opportunities that support implementation of the district technology plan.

Learning and Teaching – Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching.

Educational leaders:

- a. identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.
- b. facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.
- c. provide for learner-centered environments that use technology to meet the individual and diverse needs of learners.
- d. facilitate the use of technologies to support and enhance instructional methods that develop higher-level thinking, decision-making, and problem-solving skills.
- e. provide for and ensure that faculty and staff take advantage of quality professional learning opportunities for improved learning and teaching with technology.

Productivity and Professional Practice – Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others.

Educational leaders:

- a. model the routine, intentional, and effective use of technology.
- b. employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community.
- c. create and participate in learning communities that stimulate, nurture, and support faculty and staff in using technology for improved productivity.
- d. engage in sustained, job-related professional learning using technology resources.
- e. maintain awareness of emerging technologies and their potential uses in education.
- f. use technology to advance organizational improvement.

Support, Management, and Operations – Educational leaders ensure the integration of technology to support productive systems for learning and administration.

Educational leaders:

- a. develop, implement, and monitor policies and guidelines to ensure compatibility of technologies.
- b. implement and use integrated technology-based management and operations systems.
- c. allocate financial and human resources to ensure complete and sustained implementation of the technology plan.
- d. integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources.
- e. implement procedures to drive continuous improvement of technology systems and to
- f. support technology replacement cycles.

Assessment and Evaluation – Educational leaders use technology to plan and implement comprehensive systems of effective assessment and evaluation.

Educational leaders:

- a. use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communication, and productivity.
- b. use technology to collect and analyze data, interpret results, and communicate findings to improve instructional practice and student learning.
- c. assess staff knowledge, skills, and performance in using technology and use results to facilitate quality professional development and to inform personnel decisions.
- d. use technology to assess, evaluate, and manage administrative and operational systems.

Social, Legal, and Ethical Issues – Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues.

Educational leaders:

- A. ensure equity of access to technology resources that enable and empower all learners and educators.
- B. identify, communicate, model, and enforce social, legal, and ethical practices to promote responsible use of technology.
- C. promote and enforce privacy, security, and online safety related to the use of technology.
- D. promote and enforce environmentally safe and healthy practices in the use of technology.
- E. participate in the development of policies that clearly enforce copyright law and assign ownership of intellectual property developed with district resources.

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Appendix D:

National Education Technology Standards for Students

- 1 Basic operations and concepts
 - Students demonstrate a sound understanding of the nature and operation of technology systems.
 - Students are proficient in the use of technology.
- 2 Social, ethical, and human issues
 - Students understand the ethical, cultural, and societal issues related to technology.
 - Students practice responsible use of technology systems, information, and software.
 - Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- 3 Technology productivity tools
 - Students use technology tools to enhance learning, increase productivity, and promote creativity.
 - Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
- 4 Technology communications tools
 - Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
 - Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
- 5 Technology research tools
 - Students use technology to locate, evaluate, and collect information from a variety of sources.
 - Students use technology tools to process data and report results.
 - Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.
- 6 Technology problem-solving and decision-making tools
 - Students use technology resources for solving problems and making informed decisions.
 - Students employ technology in the development of strategies for solving problems in the real world.

Performance Indicators

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, VCRs, audiotapes, and other technologies. (1)
2. Use a variety of media and technology resources for directed and independent learning activities. (1, 3)
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)

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, remediate skill deficits, and facilitate learning throughout the curriculum. (3)
5. Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, 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)

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)

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, publications, communications, 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)

