

# **Educational Technology Plan for Highland Local SD - 048496**

**School Years:**

**2006-07**

**2007-08**

**2008-09**

**eTech Ohio Certified on May 03, 2006**

**Certification Period: July 1, 2006 - Jun 30, 2009**

*\*created using the eTech Ohio online Technology Planning Tool version 3.0 (TPTv3)*

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## Pre-Planning

### 1.0 Establish Technology Planning Committee

Assistive Technology/Special Needs Coordinator  
 Curriculum Coordinator  
 Instructional Integrationist  
 Library/Media Specialist  
 Parent  
 Principal  
 Superintendent  
 Student  
 Teacher  
 Technology Coordinator  
 Technology Support  
 Treasurer  
 Other

#### Approvers:

roger saffle (Technology Coordinator/Director)  
 Laurie Boedicker (Technology Coordinator/Director)  
 Bruce Armstrong (Superintendent)  
 Mary Markle (Treasurer)

### 1.1 Overview of TPT v3 Planning Framework

eTech Ohio's Technology Planning Tool version v 3.0, strategically addresses technology planning in an educational organization and provides guidance in implementing technology to increase student achievement. Within this technology plan you will find the educational organization's vision and mission statements as well as a plan for the following: ODE Academic Content Standards (ACS) alignment with the ODE Technology ACS, technology integration into the curriculum, technology policy, technology leadership and administration, infrastructure and networking, and budgeting.

The technology planning framework addresses 5 questions adapted from "Asking the Right Questions: Techniques for Collaboration and School Change" by Edie Holcomb. In each phase of the plan, narrative responses describe the educational organization's technology planning in the following manner:

**"Where are we now?"** addresses ASSESSMENT of current status within the educational organization

**"Where do we want to go?"** addresses GOALS for growth in various areas

**"How will we get there?"** addresses PROFESSIONAL DEVELOPMENT necessary to achieve goals

**"How will we know we're getting there?"** addresses the EVALUATION PROCESS that enables the educational organization to MONITOR PROGRESS toward the specified goals.

**"How do we sustain the momentum?"** Addresses ORGANIZATIONAL SUPPORT, EVALUATION and REVISION processes to achieve the goals

As Ohio endeavors to build more agile and effective school improvement plans, this technology plan will be an instrumental tool in fostering quality planning and managing technological changes that will impact the communities where we live.

### 1.2 Review Current Technology Plan

#### "Was the plan realistic then?"

yes, our committee concluded that our previous plan was realistic and resulted in measurable improvements and focused professional developments and purchases.

#### "Is the plan realistic now?"

November 22, 2005 District Technology Committee Meeting, concluded that, while our current plan has helped us, do to the fact that it is expiring June 06, it needs updated and revised.

### 1.3 Vision/Mission

#### A. Vision

Technology should empower students and staff to efficiently and effectively locate information, create and design products, and manage the teaching/learning environment. Technology will be used to communicate between students, staff, parents, and the world community and extend the boundaries of the classroom. Students will be prepared to be effective, productive workers and citizens of the 21st Century by using technology within the curriculum. Teachers and administrators will effectively use technology to manage communications and analyze data. Hardware and software purchases and staff development should reflect the technology standards and the most effective use of technology for instruction according to research.

**B. Mission**

The mission of technology at Highland Local Schools is to provide hardware, software, professional service, support, and training to staff, students and administrators to effectively use technology to locate, communicate, organize and analyze information. Technology standards will be intergrated into classroom instruction according to the State Standards and research supported best practice.

## Curriculum Alignment & Instructional Integration

### 2.1 Curriculum Alignment to Ohio Technology Academic Content Standards (ACS)

Discuss the level of effective technology integration into the instructional process of each academic content standard. Include the use of assistive and adaptive technologies serving special needs populations. For ESCs, also discuss how you are assisting your contracted schools with integrating technology into their instructional process.

	Where are we now?	Where do we want to go?
English Language Arts	In Progress	2008-09
Fine Arts	In Progress	2008-09
Foreign Language	In Progress	2008-09
Mathematics	In Progress	2008-09
Science	In Progress	2008-09
Social Studies	In Progress	2008-09
Technology (specific course)	In Progress	2008-09
Other Content Areas	In Progress	2008-09

#### How will we get there?

At the elementary level, We will meet in committees to map the technology standards from the state across all content areas K-5 to develop an action plan for technology integration. We will be taking an elementary team to the State Technology Conference this year and will be bringing examples of Integrated Lesson Plans to share with the staff at each elementary building.

At the Middle School the technology committee will provide standards information and facilitate collaboration. We will use eTech Ohio PD funds and staff PD days to provide technology training at the Middle School. The Middle School technology action plan is mapped to correlate professional development with the steps to full integration of the standards and documentation.

At the High School level we will map the standards by subject area. We will also develop a list of essential skills, knowledge and experiences that our freshman need to succeed at High School and our graduates need to succeed beyond High School. This will enable our staff to envision the standards as manageable and appropriate. Documentation of the indicators will be by teachers per department.

We will use the remainder of the technology PD funds to provide substitutes for teachers receiving Integration Training at every level to integrate the technology standards into the classrooms. We will continue to document student learning by archiving student projects resulting from the eTech Ohio sponsored training.

Different types of professional development in technology are offered within different settings. The Curriculum Technology Resource Teacher documents, organizes, and facilitates professional development for the district in addition to other duties. Most of the financial support for Technology Training comes from the eTech Professional Development Grant. Much of the training takes place during teacher planning periods, before or after school, district professional development days, Saturdays and during summer. The needs are determined by the District Technology Committee and building technology committees where applicable in conjunction with the Director of Curriculum and Instruction.

Modeling is done during the school day.

Skills sessions are specific to the hardware and software used and may be presented before, during and after school and as part of classes for credit.

Integration classes are available for graduate credit in the spring and early summer. Offerings are determined by a survey of needs that includes teacher input, current student achievement data from district assessments in core subjects and indicators from the State Technology Standards. Reflective practice and best practice research are important components of the integration training.

Online Tutorials are posted through <http://support.highlandschools.org> and through our online academy which

is password protected. We have offered blended classes for credit through the online server as well as providing professional development for teachers using the online server within the context of the high school coursework. We currently have 3 teachers integrating the online experience with 258 students at the high school. Training is required for teachers using the online server to comply with the TEACH act. Training has been provided online to Secretaries, Technology Personnel and teachers.

Action Research enables our teachers to effectively evaluate their own classroom practice. We are currently in the grant writing phase for action research at the Middle School, which is our District Technology Committee determined is our "building of greatest need" for the 2005-2006 school year.

Standards Alignment is an important focus of our 3 year plan. We have an action plan in progress for each level elementary, middle school and high school to integrate technology skills into the curriculum per state indicators. Common Assessments for technology products are currently being developed.

#### **How will we know we're getting there?**

We have an adopted Technology Course of Study which is available on our ESC website. By the end of each year, the technology and curriculum departments will have documentation of the current alignment at each building and at all levels.

Teachers will take the technology standards checklist and created "I Can" statements to post in the classrooms and share with parents in grades K-5. Electronic and paper documentation will be used at the elementary level by the primary teachers. Student work will be archived and a summary document will be produced.

Middle School teachers will collaborate to develop common assessment rubric for technology products as a step toward electronic portfolios. We expect all assessments to be complete and in use by the end of the 2006-2007 school year. 8th grade electronic portfolios will be used to document 21st century skills by the year 2008-2009. We have a Educational Technology lab which currently tracks skill mastery for a large portion of the technology skills. The rest will be integrated into the core subject areas.

High School teachers will review technology integration progress at department meetings. We will archive student work at each level to document the indicators and determine alignment status. Random student work will be evaluated by the building level technology teams at all levels.

#### **How will we sustain focus and momentum?**

Our plan is the result of the collaboration of the teaching staff, technology staff and administration of Highland Local Schools. The plan was initiated by the District Technology Advisory Team, which consists of the Supervisor of Technological Services, Technicians, Teacher representatives from each building, building administrators, parent and student representatives, the Curriculum Technology Resource Teacher and the Director of Curriculum. It was developed to facilitate a coordinated effort to ensure that training and equipment purchases in technology will support improvements in the educational experiences and the technology skills of all students.

Technology should empower students and staff to efficiently and effectively locate information, create and design products, and manage the teaching/learning environment. Technology will be used to communicate between students, staff, parents, and the world community and extend the boundaries of the classroom. Students will be prepared to be effective, productive workers and citizens of the 21st Century by using technology within the curriculum. Teachers and administrators will effectively use technology to manage communications and analyze data. Hardware and software purchases and staff development should reflect the technology standards and the most effective use of technology for instruction according to research. The mission of technology at Highland Local Schools is to provide hardware, software, professional service, support, and training to staff, students and administrators to effectively use technology to locate, communicate, organize and analyze information. Technology standards will be integrated into classroom instruction according to the State Standards and research supported best practice.

The plan will be reviewed annually by the Technology Planning Committee. The revised Technology Plan will be presented to the Superintendent and Curriculum Director for approval. The revised plan will be made available on the district website. It outlines our professional development model, which is consistent with the TIPs model.

Professional Development in technology is provided throughout the year on a continuous basis to all staff

members by the Curriculum Technology Resource Teacher. Training is provided in the summer, on In-Service days, during school, and after school by a certified teacher with an emphasis on Research-based best practice and standards-based instruction. In addition to the expected strategies, we will be offering professional development specifically focused on Integration of the Technology Standards at each grade level. We offer training online, small group, classes for credit, and one-on-one instruction.

The Curriculum Technology Resource Teacher works with the building level technology committee members to evaluate and revise strategies based on teacher input and curricular needs yearly. Curricular needs are determined by technology needed to support subject indicators, data from testing and diagnostic information and building committee evaluation of progress in the technology indicators.

## 2.2 English Language Arts Academic Content Standards

### Instructional Integration

1.0 **Entry** - Learn the basics of using the new technology.

2.0 **Adoption** - Use new technology to support traditional instruction.

3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.

4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.

5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-2	3.0	4.0
3-4	3.5	4.5
5-7	3.0	4.5
8-10	3.0	5.0
11-12	3.5	5.0

### How will we get there?

In Language Arts student learning goals will include technology indicators that correspond with Information Literacy and Communication indicators in the Language Arts State Standards, as well as the Information Literacy Standards in the State Library Standards. Language Arts teachers at all levels will collaborate with our media center specialists. Language Arts technology use will be integrated into Science and Social Studies at the Elementary Level, using Desktop Publishing, Web Publishing and eCommunications such as blogging and video-conferencing. At the middle school integration of technology will be incorporated with teaming initiatives. For language arts teachers at the Middle school this means a focus on research skills and literacy. High School Language Arts teachers are using an online server to facilitate forum discussions to enhance literature analysis. Professional Development in technology at all levels. will focus on standards-based lesson planning and differentiation to address integration of technology into the curriculum. Specialized training will include copyright laws, graphic organizers, Word and PowerPoint as needed. Common Rubrics for Technology products will be utilized at each level and will be part of the assessment.

### How will we know we're getting there?

We have an adopted Technology Course of Study which is available on our ESC website. By the end of each year, the technology and curriculum departments will have documentation of the current alignment at each building and at all levels.

Teachers will take the technology standards checklist and created "I Can" statements to post in the classrooms and share with parents in grades K-5. Electronic and paper documentation will be used at the elementary level by the primary teachers. Student work will be archived and a summary document will be produced for staff members to use in assessing progress with technology integration at each grade level.

Middle School teachers will collaborate to develop common assessment rubric for technology products as a step toward electronic portfolios. We expect all assessments to be complete and in use by the end of the 2006-2007 school year. 8th grade electronic portfolios will be used to document 21st century skills by the year 2008-2009. We have a Educational Technology lab which currently tracks skill mastery for a large portion of the technology

skills. The rest will be integrated into the core subject areas.

High School teachers will review technology integration progress at department meetings. We will archive student work at each level to document the indicators and determine alignment status. Random student work will be evaluated by the building level technology teams at all levels.

#### How will we sustain focus and momentum?

The plan will be reviewed annually by the Technology Planning Committee. The revised Technology Plan will be presented to the Superintendent and Curriculum Director for approval. The revised plan will be made available on the district website.

Professional Development in technology is provided throughout the year on a continuous basis to all staff members by the Curriculum Technology Resource Teacher. Training is provided in the summer, on In-Service days, during school, and after school by a certified teacher with an emphasis on Research-based best practice and standards-based instruction. We offer training online, small group, classes for credit, and one-on-one instruction.

The Curriculum Technology Resource Teacher works with the building level technology committee members to evaluate and revise strategies based on teacher input and curricular needs. Curricular needs are determined by technology needed to support subject indicators, data from testing and diagnostic information and building committee evaluation of progress in the technology indicators.

## 2.3 Fine Arts Academic Content Standards

### Instructional Integration

1.0 **Entry** - Learn the basics of using the new technology.

2.0 **Adoption** - Use new technology to support traditional instruction.

3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.

4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.

5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-4	2.5	3.0
5-8	3.5	4.5
9-12	3.5	4.5

### How will we get there?

In Fine Arts student learning goals will include technology indicators that correspond with Music theory and composition, Computer Art, ethics and Art History indicators in the Fine Arts State Standards. Professional Development in technology will focus on standards-based lesson planning and differentiation to address integration of technology into the curriculum. Specialized training will include copyright laws and ethics, Sound Forge music editing software, Finale software, Photoshop Elements, PowerPoint, digital photography, Illustrator, InDesign and Publisher as needed. In foreign language we are providing training in the integration of translators, web publishing, podcasting and video-conferencing.

### How will we know we're getting there?

In fine arts, all our 6-12 teachers will have websites by the end of the 2006 school year updated weekly. In the 2006-2009 school years, they will expand their websites to include more resources, podcasts and links to online tools. During these years we will be focused on using the internet to improve communication with parents and provide a display for our students' artistic talent. We are expecting an increase of electronic portfolios for the visual arts and we are expanding our computer art program to include digital animation by 2009.

### How will we sustain focus and momentum?

In the fine arts teachers are driven to use technology as a medium for artistic expression and communication. The Curriculum Technology Resource Teacher facilitates technology training specialized for the needs of our fine arts department by meeting with these teachers and providing training and assistance with integration, software previews and grant-writing.

## 2.4 Foreign Language Academic Content Standards

### Instructional Integration

- 1.0 **Entry** - Learn the basics of using the new technology.
- 2.0 **Adoption** - Use new technology to support traditional instruction.
- 3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.
- 4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.
- 5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-4	N/A	N/A
5-8	4.0	5.0
9-12	2.5	5.0

### How will we get there?

In Foreign Languages student learning goals will include technology indicators that correspond with indicators in the Foreign Language State Standards. Foreign Language teachers at all levels will integrate web resources and presentation software. Professional Development in technology will focus on standards-based lesson planning and differentiation to address integration of technology into the curriculum. Specialized training will include copyright laws, Word, Timeliner, and PowerPoint as needed.

### How will we know we're getting there?

In foreign language, all our teachers will have websites by the end of the 2006 school year updated weekly. In the 2006-2009 school years, they will expand their websites to include more resources, podcasts and links to online tools for authentic language learning. During these years we will be incorporating various Video-Conferencing opportunities which include scheduled connections between the middle school exploratory class and the high school foreign language classes.

### How will we sustain focus and momentum?

The foreign language teachers will be incorporating technology to enhance conversational learning and/or real-world applications. The goal of the department is to inspire all students to learn the language and customs of at least one other culture. The Curriculum Technology Resource Teacher and the Director of Curriculum are committed to offering the specialized training needed to facilitate more effective instruction in foreign languages. To this end, the Curriculum Technology Resource Teacher facilitates technology training specialized for the needs of our foreign language department by meeting with these teachers.

## 2.5 Mathematics Academic Content Standards

### Instructional Integration

- 1.0 **Entry** - Learn the basics of using the new technology.
- 2.0 **Adoption** - Use new technology to support traditional instruction.
- 3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.
- 4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.
- 5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-2	2.0	2.0
3-4	3.0	4.0
5-7	1.5	3.5
8-10	3.0	4.0
11-12	3.0	4.5

**How will we get there?**

In Mathematics student learning goals will include technology indicators that correspond with Mathematics indicators in the Mathematics State Standards. Math teachers at all levels will collaborate with our media center specialists. Professional Development in technology will focus on standards-based lesson planning and differentiation to address integration of technology into the curriculum. Specialized training will include copyright laws, excel, and geometer's sketchpad.

Our High School Mathematics department determined that the technology standards are remiss in the lack of calculator integration indicators. To that end we have added Scientific Calculator and Graphing Calculator indicators to our standards at the middle school level. This is particularly important as graphing calculators are permissible on the SAT and necessary for higher level mathematics.

**How will we know we're getting there?**

We have an adopted Technology Course of Study which is available on our ESC website. By the end of each year, the technology and curriculum departments will have documentation of the current alignment at each building and at all levels.

Elementary teachers integrate excel skills at the 4th and 5th grade levels. Middle School math teachers will collaborate to develop common assessments for using calculators and spreadsheets as a step toward electronic portfolios. We expect all assessments to be complete and in use by the end of the 2006-2007 school year. 8th grade electronic portfolios will be used to document 21st century skills by the year 2008-2009.

High School teachers will review technology integration progress at the math department meetings. The greatest concerns with technology at this level are effective calculator use and the investigation of interactive remotes to engage student interaction during math classes.

**How will we sustain focus and momentum?**

Professional Development in technology is provided throughout the year on a continuous basis to all staff members by the Curriculum Technology Resource Teacher. Training is provided in the summer, on In-Service days, during school, and after school by a certified teacher with an emphasis on Research-based best practice and standards-based instruction. We offer training online, small group, classes for credit, and one-on-one instruction.

The Curriculum Technology Resource Teacher works with the building level technology committee members to evaluate and revise strategies based on teacher input and curricular needs. At this time, we are focused on grant-writing with the mathematics teachers to procure needed equipment for technology integration 6-12.

**2.6 Science Academic Content Standards****Instructional Integration**

1.0 **Entry** - Learn the basics of using the new technology.

2.0 **Adoption** - Use new technology to support traditional instruction.

3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.

4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.

5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-2	2.0	3.5
3-5	3.0	4.0
6-8	3.0	4.5
9-10	4.0	5.0
11-12	4.5	5.0

**How will we get there?**

In Science student learning goals will include technology indicators that correspond with the Science and Technology indicators in the Science State Standards. Professional Development in technology will focus on standards-based lesson planning and differentiation to address integration of technology into the curriculum.

Specialized training will include copyright laws, probes for data collection, Excel and other software as needed.

### How will we know we're getting there?

We have an adopted Technology Course of Study which is available on our ESC website. By the end of each year, the technology and curriculum departments will have documentation of the current alignment at each building and at all levels.

Teachers will take the technology standards checklist and created "I Can" statements to post in the classrooms and share with parents in grades K-5. Electronic and paper documentation will be used at the elementary level by the primary teachers. Student work will be archived and a summary document will be produced.

Middle School teachers will collaborate to develop common assessment rubric for technology products as a step toward electronic portfolios. We expect all assessments to be complete and in use by the end of the 2006-2007 school year. 8th grade electronic portfolios will be used to document 21st century skills by the year 2008-2009. We have a Educational Technology lab which currently tracks skill mastery for a large portion of the technology skills. The rest will be integrated into the core subject areas.

High School teachers will review technology integration progress at department meetings. We will archive student work at each level to document the indicators and determine alignment status. Random student work will be evaluated by the building level technology teams at all levels.

### How will we sustain focus and momentum?

The plan will be reviewed annually by the Technology Planning Committee. The revised Technology Plan will be presented to the Superintendent and Curriculum Director for approval. The revised plan will be made available on the district website.

Professional Development in technology is provided throughout the year on a continuous basis to all staff members by the Curriculum Technology Resource Teacher. Training is provided in the summer, on In-Service days, during school, and after school by a certified teacher with an emphasis on Research-based best practice and standards-based instruction. We offer training online, small group, classes for credit, and one-on-one instruction.

The Curriculum Technology Resource Teacher works with the building level technology committee members to evaluate and revise strategies based on teacher input and curricular needs. Curricular needs are determined by technology needed to support subject indicators, data from testing and diagnostic information and building committee evaluation of progress in the technology indicators.

## 2.7 Social Studies Academic Content Standards

### Instructional Integration

1.0 **Entry** - Learn the basics of using the new technology.

2.0 **Adoption** - Use new technology to support traditional instruction.

3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.

4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.

5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-2	2.0	2.5
3-5	2.5	3.5
6-8	3.5	4.5
9-10	3.0	4.5
11-12	2.5	4.0

### How will we get there?

In Social Studies student learning goals will include technology indicators that correspond with indicators in the Social Studies State Standards. Professional Development in technology will focus on standards-based lesson planning and differentiation to address integration of technology into the curriculum. Specialized training will include copyright laws, PowerPoint and SmartBoard as needed.

**How will we know we're getting there?**

We have an adopted Technology Course of Study which is available on our ESC website. By the end of each year, the technology and curriculum departments will have documentation of the current alignment at each building and at all levels.

Teachers will take the technology standards checklist and created "I Can" statements to post in the classrooms and share with parents in grades K-5. Electronic and paper documentation will be used at the elementary level by the primary teachers. Student work will be archived and a summary document will be produced.

Middle School teachers will collaborate to develop common assessment rubric for technology products as a step toward electronic portfolios. We expect all assessments to be complete and in use by the end of the 2006-2007 school year. 8th grade electronic portfolios will be used to document 21st century skills by the year 2008-2009. We have a Educational Technology lab which currently tracks skill mastery for a large portion of the technology skills. The rest will be integrated into the core subject areas.

High School teachers will review technology integration progress at department meetings. We will archive student work at each level to document the indicators and determine alignment status. Random student work will be evaluated by the building level technology teams at all levels.

**How will we sustain focus and momentum?**

The plan will be reviewed annually by the Technology Planning Committee. The revised Technology Plan will be presented to the Superintendent and Curriculum Director for approval. The revised plan will be made available on the district website.

Professional Development in technology is provided throughout the year on a continuous basis to all staff members by the Curriculum Technology Resource Teacher. Training is provided in the summer, on In-Service days, during school, and after school by a certified teacher with an emphasis on Research-based best practice and standards-based instruction. We offer training online, small group, classes for credit, and one-on-one instruction.

The Curriculum Technology Resource Teacher works with the building level technology committee members to evaluate and revise strategies based on teacher input and curricular needs. Curricular needs are determined by technology needed to support subject indicators, data from testing and diagnostic information and building committee evaluation of progress in the technology indicators.

**2.8 Technology Academic Content Standards****Instructional Integration**

1.0 **Entry** - Learn the basics of using the new technology.

2.0 **Adoption** - Use new technology to support traditional instruction.

3.0 **Adaptation** - Integrate new technology into traditional classroom practice. Here, they often focus on increased student productivity and engagement by using word processors, spreadsheets, and graphics tools.

4.0 **Appropriation** - Focus on cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.

5.0 **Invention** - Discover new uses for technology tools, for example, developing spreadsheet macros for teaching algebra or designing projects that combine multiple technologies.

	Where are we now?	Where do we want to go?
Pre-K	N/A	N/A
K-2	1.0	2.0
3-5	2.5	2.5
6-8	3.5	4.5
9-10	3.5	4.5
11-12	3.0	5.0

**How will we get there?**

As we meet to integrate the technology standards into the curriculum, there are some things that do not fit easily into the core subject areas. Many of these standards are the "career" exploration standards. We have 2 strategies for integrating these "bad fit" standards. First, we are assessing the standards within the following bands: K-2, 3-5, 6, 7-8, 9-10 and 11-12. This gives us a small window to move a few indicators within the bands if it enables the indicators to be fully integrated into the curriculum. We are also developing resources to enable

teachers to easily incorporate them into a lesson with other indicators. For example, our high school web design class has developed a "seven technological systems" website for our second graders to use on our school's intranet.

**How will we know we're getting there?**

We have an adopted Technology Course of Study which is available on our ESC website. By the end of each year, the technology and curriculum departments will have documentation of the current alignment at each building and at all levels.

Teachers will take the technology standards checklist and created "I Can" statements to post in the classrooms and share with parents in grades K-5. Electronic and paper documentation will be used at the elementary level by the primary teachers. Student work will be archived and a summary document will be produced.

Middle School teachers will collaborate to develop common assessment rubric for technology products as a step toward electronic portfolios. We expect all assessments to be complete and in use by the end of the 2006-2007 school year. 8th grade electronic portfolios will be used to document 21st century skills by the year 2008-2009. We have a Educational Technology lab which currently tracks skill mastery for a large portion of the technology skills. The rest will be integrated into the core subject areas.

High School teachers will review technology integration progress at department meetings. We will archive student work at each level to document the indicators and determine alignment status. Random student work will be evaluated by the building level technology teams at all levels.

**How will we sustain focus and momentum?**

The plan will be reviewed annually by the Technology Planning Committee. The revised Technology Plan will be presented to the Superintendent and Curriculum Director for approval. The revised plan will be made available on the district website.

Professional Development in technology is provided throughout the year on a continuous basis to all staff members by the Curriculum Technology Resource Teacher. Training is provided in the summer, on In-Service days, during school, and after school by a certified teacher with an emphasis on Research-based best practice and standards-based instruction. We offer training online, small group, classes for credit, and one-on-one instruction.

The Curriculum Technology Resource Teacher works with the building level technology committee members to evaluate and revise strategies based on teacher input and curricular needs. Curricular needs are determined by technology needed to support subject indicators, data from testing and diagnostic information and building committee evaluation of progress in the technology indicators.

## Technology Policy, Leadership and Administration

### 3.1 Analyzing District Education Technology Policies

**Awareness** - Policy is not in place; little or no understanding of importance of policy

**Adoption** - Traditional policies are in place; lack of consistent use

**Exploration** - New/updated policies are being researched

**Transformation** - Policies support high performing learning environments

	Where are we now?	Where do we want to go?
A. Electronic network linking district with other stakeholders for information exchange, collaboration and distance education	Transformation	Transformation
B. District wide program providing data or administrative systems to schools (e.g., fiscal databases, student assessment results)	Transformation	Transformation
C. Technology-related facilities design, equipment and software	Transformation	Transformation
D. Technology acquisition and standards	Exploration	Transformation
E. Research and evaluation of educational technology initiatives	Transformation	Transformation
F. Development and dissemination of educational technology devices, applications and approaches	Exploration	Transformation
G. District funding for educational technology	Adoption	Transformation
H. Equity and access to technology	Exploration	Transformation

#### How do we get there?

The District Technology Committee reviews the Acceptable Use Policies for Staff and Students. Students under 18 must have their parents signatures on the AUP. Only students with Acceptable Use Policies on file are permitted to use the computers. The Media Center Specialists at each building notify the teachers of those students who do not have AUPs on file and contact the parents to remind and encourage them to sign the policy. Technology use for students without AUPs is limited to using quickpads.

Building level administration is responsible for the review and proposed revision of policies involving student-owned technology. The building level administrators also handle discipline situations involving technology with assistance from other personnel including technology staff upon request of the acting administrator.

The decision to allow personal technology in the classroom is the classroom teacher's choice, unless that student's technology is specified by an Individualized Education Plan or 504 Plan. No personal computers are allowed on the network by wireless or cable. Students are allowed to possess cell phones, and mp3 players as long as they are not used during school hours. Students are permitted to use pda's and compact storage devices.

We lack policy for emerging technologies, such as forums, blogs and ftp access. These products are currently in use on our own equipment with sketchy guidelines from the AUP. We need to address these issues within the District Technology Committee during the 2006-2007 school year.

Our other area of weakness is the posting and instruction of technology policies K-12. This is a need that must be addressed through the ethics education requirement of the technology standards. A survey of our teachers confirmed that they need our technology department to develop and disseminate resources and information to be used within the classroom.

#### How do we know we are getting there?

The policy for emerging technologies, such as forums, blogs and ftp access will be developed by a sub-committee of the district technology committee. The policy will be approved by the main committee before presentation to the administration. This milestone should be completed during the 2006-2007 school year.

Resources for technology and ethics will be developed for classroom use by the technology/curriculum staff with input and reflections from the classroom teachers. Each teacher should receive from the tech department a

packet which includes ethical guidelines, example lessons, classroom posters and reminders. These will be developed during the 2006-2007 school year.

Teacher responses to the resource materials will be collected and summarized. The curriculum technology resource teacher will direct any changes necessary to the materials. The effectiveness of the instruction will be evaluated through the technology benchmarks assessment described in phase 2.

### How do we sustain the focus and momentum?

Our district creates and reviews technology policy development through the District Technology Committee. The committee is required to meet at least twice a year, but usually meets more often. This provides the structure and support for the policy evaluation/development process. The curriculum technology resource teacher and the technology coordinator are responsible to bring research and needs assessments for hardware and curricular needs in technology to the committee. If the consensus of the committee is that we need to address a new policy or a revision, a sub-committee is established to research/develop/revise and then they bring it back to the main committee. The need to make students aware of the technology policies falls within our approved technology curriculum and will be assessed with the other indicators.

## 3.2 Analyzing District Leadership

**Awareness** - These administrators do not use technology. An expectation to use technology with students and staff is not expressed nor do the administrators support the staff in the use of technology.

**Adoption** - Administrators have access to technology but don't use it on a comprehensive basis. Educators in the building are expected to use the technology but not in a powerful way to improve student achievement. Leaders support staff in developing technology skills.

**Exploration** - Leaders encourage and support educators in the use of technology, but the use may not be pervasive throughout the system. Administrators use technology and see some benefit.

**Transformation** - Leadership provides strong vision encompassing all aspects of educational technology. Technology is vital to administrators and is utilized in innovative ways on a daily basis. Administrators fully understand how to use the tools effectively in the classroom and to manage education.

	Where are we now?	Where do we want to go?
A. Instructional leadership, assessment and curriculum	Exploration	Transformation
B. Competencies/Standards (e.g. ISTE NETS-A)	Exploration	Transformation
C. Advocacy for technology	Exploration	Transformation
D. Measures and accountability for effective use	Exploration	Transformation
E. Role model in the use of technology	Adoption	Transformation
F. Professional development	Exploration	Transformation
G. Support for educational technology	Adoption	Transformation
H. Professional practice	Adoption	Transformation

### How do we get there?

This has been identified as an area of great need. Highland administrators need to be current on research-based, best practice in order to evaluate teachers effectively. They must understand the necessity for technology within the classroom and how it can be an impetus for instructional transformation. It is not the devices that improve academic achievement, it is the devices in the hands of trained teachers focused on the curriculum. The administrative team must be able to recognize when technology can improve or automate administrative functions and must be willing to discuss how technology can improve or impede communications and efficiency. They must understand that every technology carries a total cost of ownership that requires professional development and financial support.

A summer boot camp type of training will be implemented for training of administrators. Training will be given in the use of Microsoft Office, Basic Windows operating systems, Technology benchmarks, usage of some of our more prominent educational software (Kidpix etc.), as well as training on the technology services available to our students (blog server, FTP, etc. Administrators must understand the instructional strategies needed to use this technology in the classroom. They must have a working knowledge of the Technology Standards as well as the technology recommendations within other subject areas. They must be current on research of technology use as it relates to student achievement and have an awareness of emerging trends.

In order to keep administrators abreast of additions and changes in the technology offerings and infrastructures during the school year, presentations will be given at the monthly administration meetings. We will demonstrate effective technology use in the classroom and how we are using it in conjunction with the curriculum. These presentations will include research summaries and evaluation artifacts from the K-12 classrooms. Further smaller more focused administrator training sessions can be set up if further training on a emerging technology is needed.

#### How do we know we are getting there?

The process of keeping our administrators current with technology is ongoing. Technology is changing and the demands of our workforce fluxuates. Therefore, professional development and assessment of skills and knowledge of administrators must be ongoing. We have two major strains of professional development planned: a focused, intense program to bring the administrative staff current with expected administrative skills and a continuous professional development to maintain progress and inform.

For the administrative boot camp, our curriculum will cover the research into best practice, the Technology Standards for students and planning for technology use. We will use a pre- and post- workshop assessment to evaluate the effectiveness of our training. We also provide support and training on-demand to all administrators during the year. One year following the training we will reconvene the administrative team to evaluate the lasting effects of the boot camp to determine it's effectiveness.

For our monthly sessions to the administrative team, we will survey the administration bi-annually to evaluate the effectiveness of our sessions as well as allow administrative input into what is presented.

#### How do we sustain the focus and momentum?

Our District Technology Committee will review a summary of the effectiveness of the two administrative initiatives. The committee will use the data collected, artifacts from the training, and the responses from the administrators to determine if the training is effective. The district technology will then make a motion to continue the initiative, expand the initiative or revise the initiative. Any decisions by the committee must be consistent with our mission statement and support the curricular goals of the district.

### 3.3 Technology Leader/Coordinator Time Commitments

	Where are we now?	Where do we want to go?
Strategic/Project/Action Planning	10%	10%
Acquisitions/Procurement	5%	1%
Deployment/Implementation of Technology	15%	11%
Maintenance & Repair	10%	1%
End-user Technical Support & Training	25%	28%
Curriculum Alignment & Instructional Integration	20%	23%
Fiscal Management/Grant Applications	3%	6%
Superintendent Cabinet/Executive/Board Meetings	1%	1%
Tech Staff Development & Management	3%	5%
Policy Development, Monitoring & Enforcement	5%	5%
Evaluating New/Emerging Technologies	3%	9%
Other	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>

#### Other (please describe):

na

#### How will we get there?

The main components needed for successful technology leadership is proper staffing and proper Staff development training. Highland has split the technology leadership position into two parts: Technology Coordinator and Technology Integration Specialist.

This takes advantage of the special backgrounds and training of each and allows each person to concentrate on the section in which they specialize. The Technology Coordinator's primary responsibilities are Procurement, Implementation, Planning and Maintenance. The Technology Integration Specialist's primary responsibilities are staff development, curriculum integration, and resource management.

We need to spend a larger percentage of time in staff training, curriculum alignment and emerging technologies. We need to assess and integrate emerging technologies such as podcasting, blogging, video conferencing, and online classes. This will require teacher training, hardware and software, evaluation periods and alignment with the standards.

The tech department staff is efficient and capable to support the pcs, servers, website and network. This frees up the technology leaders to perform their given duties and allocate more time to emerging technologies.

An area for concern is Technology Professional Development for the Technology Department. Currently all learning is self taught. A more structured Professional Development Strategy is needed if we are to remain progressive.

#### **How will we know we are getting there?**

Professional Development has implemented and evaluated educational technologies successfully. It helps teachers link effective uses of technology to impacts on student learning. Evidence of technology literacy, faculty meeting agendas, lesson plans, and classroom observations are all ways to determine a teacher's grasp of technology as a learning tool. The most useful program evaluation is one in which a strong formative element examines the connection between instructional practice, technology uses, and learning outcomes. Teachers are integral to the process of evaluating technology coordinators and leaders.

Teachers can also play key roles in measuring and documenting changes in student learning as they occur.

Teachers who have learned to use technology effectively in the classroom are convincing their colleagues of technology's potential.

Technology usage in the classroom is the best indicator of successful technology implementation.

#### **How will we sustain focus and momentum?**

A main driver of focus and momentum is the proper allocation of a technology budgets. A major portion of the budget should be allocated to teacher training/ staff development. Without adequate training, purchases of hardware are not efficiently utilized. With increased training will come an increased eagerness on the part of educators to utilize new innovations in their classrooms. Curriculum should remain the driving force behind technology implementation. But, it should also be noted that antiquated and outdated pcs and equipment will lead to frustration and resentment. Even the most innovative educator will suffer and flounder if not given proper hardware and software.

# Technology Infrastructure, Management and Support

## 4.1 Networking, Internet & Telecommunications

### "Where are we now?"

**None** - This technology does not currently reside on the network.

**Some** - There are pieces of this technology residing on the network. It does not exist in all buildings or only in places.

**Many** - This technology is pervasive throughout the district and/or building.

### "Where do we want to go?"

**Decrease** - We plan to decrease this technology on the network.

**No Change** - We plan to maintain the level of technology on the network.

**Researching** - We are investigating if we want to implement this technology on the network or if we want to increase or decrease this technology on the network.

**Increase** - We plan to increase this technology on the network.

	Where are we now?	Where do we want to go?
Thin/Network Clients	None	Researching
File and Print Sharing	Many	No Change
Internet Traffic	Many	Increase
Video Conferencing (IP)	Some	Increase
Video Conferencing (ATM)	None	No Change
Video On-Demand (local building/district server)	Some	Increase
Video Streaming (Internet)	Some	Increase
Voice Communications - Voice over IP	None	No Change
Voice Communications - Centrex/PBX	Many	No Change
Remote Access (Dial-up/VPN) to School Resources	Some	Increase
Wireless	Some	No Change
Email	Many	No Change
Enterprise/Shared Applications (e.g., online grade book)	Some	Increase

	What is the current impact?
LAN Bandwidth	Increase
WAN Bandwidth	Increase
Internet Bandwidth	Increase
Telephone Circuits	Increase

### How will we get there?

Technology Initiatives for Highland Local Schools will address the needs of the students, correspond with the expected State Technology Standards and support the curricular aims of the district.

Technology skills will continue to be incorporated within the existing curriculum. Professional development will focus on integrating technology by using models of instruction that support academic standards, interdisciplinary learning, and encourage student-centered projects that include productivity, information literacy and the use of technology for decision-making.

A main area of concern is out aging Marconi ATM backbone. There are occasional network lockups and down times. This year we hired an outside consulting firm to do our Erate. This greatly increased and streamlined our filing process. We hope to re-allocate these saving, and combined with our Onet money, to be able to help replace our aging back bone. Another use of Erate money may be to increase the number or POTS circuits at out Hinckley Alltel location, as all of our 440 and 216 calles are routed through there via our PBX.

### How will we know we are getting there?

Actual usage time, bandwidth demands,

requests for assistance, and requests for purchase will show the level of usage of our technology, and the need

for further growth of the district network and equipment. Correlation of the usage with achievement of the technology indicators will confirm that the technology use by students is necessary and productive. Staff utilization will increase as we are incorporating online gradebooks into K-2 starting next year and each year we increase web publication by teachers for classroom use.

Staff surveys will be designed and made available for the services to assess and evaluate the network and equipment.

#### How will we sustain focus and momentum?

Highland is investigating the purchase of a packet analyzer to give us the ability to determine if usage problems are server related, application related or network related. Additionally, this would allow us to monitor misuse of bandwidth.

Currently, Highland has a strategic plan in progress to address expansion of the district. If funds become available for facilities, the aging network core components would need to be replaced as part of the facilities expansion issue.

## 4.2 Access to Technology

**None** - This technology does not exist in the building(s) and/or district.

**Some** - This technology is in the building(s) and district, but there are only a few in each location.

**Pervasive** - This technology is an integral part of the building(s) and district.

**Late Adopter** - Waiting until the technology is quite established in the field and fully tested.

**Middle Adopter** - Waiting until the first wave has been introduced into the school setting.

**Early Adopter** - One of the first settings to pilot and test the technology.

	Where are we now?	Where do we want to go?
Teacher to Computer Ratio (1:n)	1:1	1:1
Student to Computer Ratio (1:n)	1:9	1:5
Peripherals (e.g. scanner, digital camera)	Some	Pervasive
Emerging Technologies	Middle adopter	Middle adopter
Assistive and adaptive hardware (e.g. Intellikeys, Alpha Smart) and specialized software	Some	Pervasive

#### How will we get there?

The Director of Curriculum and the Technology Intergration Teacher in cooperation with the District Technology Coordinator will monitor the infusion of technology across the curriculum. The infrastructure will be upgraded and maintained to support the needs of the district. Emerging technologies have been and will be implemented on a test pilot basis.

#### How will we know we are getting there?

The process for evaluation is done by the building and district technology committees. Needs are brought to the committee by teachers and staff. The request are reviewed monthly. Request for equipment and software are approved on a curriculum need.

#### How will we sustain focus and momentum?

The plan will be reviewed annually by the Technology Planning Committee. All strategies and action steps, data gathered from the BETA, updates to the CIP/SIP, staff development evaluations, staff surveys, and district standardized tests results will be considered in changes needed to improve the overall tech plan.

The revised Technology Plan will be presented to the Superintendent and curriculum director for approval.

## 4.3 Stakeholder Access to Educational Information & Applications

1. **None:** Our organization does not have this type of electronic system. We maintain paper records.
2. **Minimal:** Our organization utilizes some electronic documents to manage these systems and processes such as spreadsheets or word processor.
3. **Adequate:** Our organization uses database software to manage these systems and documents.
4. **Advanced:** Our organization shares this type of information using industry-adopted data standards and practices (e.g. SIF, XML-Web Services or EDI).

#### Tool

	Where are we now?	Where do we want to go?
Student Information Services	3 - Adequate	4 - Advanced
Instructional Applications	3 - Adequate	4 - Advanced
Data Analysis & Reporting	3 - Adequate	4 - Advanced
Grade Book	3 - Adequate	4 - Advanced
Library Automation	4 - Advanced	4 - Advanced
Facilities Management	2 - Minimal	3 - Adequate
Voice Telephony	3 - Adequate	4 - Advanced
Human Resources & Financial Management	3 - Adequate	4 - Advanced
Network Account Management	2 - Minimal	4 - Advanced
Transportation	3 - Adequate	3 - Adequate
Food Services	3 - Adequate	3 - Adequate

### How will we get there?

The district will be expanding the use of Novell Netstorage for all students and teacher access to server drives from home. FTP access has also been implemented for student and teachers. VPN is currently in the testing stages. SSH is being researched and may be implemented in the future.

Training session with High School and key Middle School teachers on Netstorage and FTP was implemented as part of our staff wavier days. The response to technology training on wavier days has been overwhelmingly positive. Future training for all teachers for on remote access to our servers, as well as additional technology training, will be implemented through future wavier days. Student training on remote access is primarily done by the classrooms teachers and through the technology department on a one-on-one basis.

### How will we know we are getting there?

Staff development surveys will be designed and made available for each offering to assess and evaluate the effectiveness and access to these systems. It is critical that these systems be configured so that the data can be accessed by stakeholders to guide and support standards-based instruction, student achievement and educational decision-making.

### How will we sustain the focus and momentum?

The plan will be reviewed annually by the Technology Planning Committee. All strategies and action steps, data gathered from the BETA, updates to the CIP/SIP, staff development evaluations, staff surveys, and district standardized tests results will be considered in changes needed to improve the overall tech plan.

The revised Technology Plan will be presented to the Superintendent and curriculum director for approval.

## 4.4 Educational Software

**Never** - When selecting educational software, this process never occurs.

**Rarely** - When selecting educational software, occasionally this process is followed.

**Sometimes** - When selecting educational software, we typically follow and/or incorporate this process.

**Always** - When selecting educational software, this process is always followed and/or incorporated.

### Selection Processes

	Where are we now?	Where do we want to go?
Requirements gathering, feature/fit analysis to goal	Always	Always
Professional development planning for end users and support personnel	Always	Always
Criteria for evaluation developed - including alignment to ACS and curriculum	Always	Always
Evaluation of demo copies	Sometimes	Sometimes
Implementation pilots	Sometimes	Sometimes
Replacement cycle (upgrade, retire, new)	Sometimes	Sometimes
System requirements / technical and operational support	Always	Always

**How will we get there?**

Factors to consider in specifying requirements for software include: compatibility with available hardware; cost (Will the school need multiple copies of the software? Will a site license be necessary? ); user friendliness; level of interaction desired; adequacy of documentation; access to technical support via toll-free number; and of course, direct correlation with the instructional objectives and curriculum requirements identified in the needs analysis. We also use best practice research to determine if a program is developmentally appropriate. Software purchases only occur when we have a corresponding plan in place for professional development, which includes training and assessment.

**How will we know we are getting there?**

After the rigorous selection process, and implementation of the software training, rubrics are developed for software that is used to produce a product. For online resources such as research databases and streaming media, use is monitored by our media center specialists. Other software for specific skills is only purchased after a trial demonstration period and documented student achievement is observed. We are actively moving in the direction of increased research, productivity and web publishing.

**How will we sustain focus and momentum?**

The plan will be continually reviewed by the building's Technology Committees. Improvement and intergration of technology standards into the curriculum, as well as improved district standardized tests results will be considered in changes needed in the procurement of software.

**4.5 Security**

1. **None:** Organization does not have any of these policies or securities in place.
2. **Minimal:** The basic functions are present, but not all layers are addressed.
3. **Adequate:** The basic functions are present and all layers are addressed and integrated.
4. **Advanced:** The basic functions are present, all layers are addressed and integrated, and proactive monitoring with security response and forensic log analysis procedures are in place.

	Where are we now?	Where do we want to go?
AUP (Acceptable Use Policy)	Yes	Yes
User Account management and network authentication policies	3 - Adequate	3 - Adequate
Security zones	1- None	1- None
Wireless network security policies	2 - Minimal	3 - Adequate
Central log mechanism and review policy	3 - Adequate	3 - Adequate
Incident response procedures	1- None	3 - Adequate
Network security	3 - Adequate	4 - Advanced
Host Security	2 - Minimal	3 - Adequate
Data security / integrity	3 - Adequate	3 - Adequate
Anti-virus software	3 - Adequate	4 - Advanced
Spyware	2 - Minimal	3 - Adequate
Firewall	4 - Advanced	4 - Advanced
Filtering	4 - Advanced	4 - Advanced

**How will we get there?**

Security and protection of Data and Information, is always a concern. The front line protection is passwords. On the local network, all teachers are assigned passwords, and have the ability to change them when desired. For more sensitive information, such as grades, student information, the passwords are assigned and required to be changed every 90days. Also, all student demographics are hosted off site on an eSIS system. Our network is behind firewalls, filters and other security systems provided by our ITC, LEECA.

We have many logging and tracking programs that track access and usage of our internal systems. All of our machines have a anti-virus program that is updated daily from one of our central servers.

**How will we know we are getting there?**

Indicators to determine and measure the goals will have to be a combination of the many logging and tracking programs that track access and usage of our internal systems, and diligent scanning of the network. The network will have to continue to be scanned for rouge programs and unauthorized software manually.

The possibility of a Packet shaper type device is being considered. The reports generated by this device, would help greatly in determine the achievement of the above goals.

#### How will we sustain the focus and momentum?

The network is regularly scanned for rouge programs, and scanned for viruses. unauthorized programs are removed. Tracking and history information is then used to determine who installed the software. Disciplinary actions are then taken by the appropriate administrator.

Accounts are deleted immediately upon termination, or resignation of an employee. Information is given to the technology department by the treasurer/personnel department upon change of employment status.

Leeca also monitors and maintains our connection to the outside world for problems such as excessive traffic from one IP address, or port scans.

## 4.6 Technology Support and Management

### Support Ratios (1:n)

	Where are we now? (1:n)	Where do we want to go? (1:n)
Support Staff to Students	1:640	1:533
Support Staff to Teachers	1:41	1:34
Support Staff to Computers	1:220	1:183
Support Staff to Buildings	1:1.4	1:1.2

	Where are we now?	Where do we want to go?
Average Response Time (Days)	2	1
Service Level Agreement (SLA)	No	No
Full-time technology coordinator/director	Yes	Yes

#### How will we get there?

Highland Local Schools network and infrastructure is supported mostly in house. There is a centralized help desk system that all staff use to enter their own help tickets. Buildings are serviced on a rotational basis. The average turn around time is approximately 31hrs. The technology department is comprised of:

One Technology Coordinator, one full time Technology office assistant, two full time Support personnel, two part-time Student helpers. Additionally, one full time Technology Resource Specialist is on staff for all professional development and Curriculum/Technology integration.

#### How will we know we are getting there?

End user satisfaction in technology support is easily determined by reports generated by our help desk.

Comments and concerns are also addressed at building and district technology meetings. A yearly Technology Satisfaction survey is currently under development.

#### How will we sustain focus and momentum?

The plan will be reviewed annually by the Technology Planning Committee. All strategies and action steps, data gathered from the BETA, updates to the CIP/SIP, staff development evaluations, staff surveys, and district standardized tests results will be considered in changes needed to improve the overall tech plan.

The revised Technology Plan will be presented to the Superintendent and curriculum director for approval.

## 4.7 Total Cost of Ownership

**None** - This factor is not accounted for in the cost analysis.

**Some** - This factor has cursory consideration but is not a primary decision driver.

**More** - There is deliberate consideration for this factor, but it may not always be a primary decision driver.

**Extensive** - This factor is always considered in cost analysis and is a primary decision driver.

#### Process

	Where are we now?	Where do we want to go?
Vendor Relationships	Some	Some
Procurement Plan	Some	Extensive
Specifications/Requirements/Fits Analysis	More	Extensive
Integration of donated time, materials or services	Some	Some
Deployment/Installation plan	Some	Extensive
Initial Training and Professional Development	More	Extensive
Evaluation of current external support costs versus new purchase	Some	More
Loss of institutional knowledge for replaced systems	Some	None
Phase Out/Replacement cycle	None	More
Disposal costs	None	None

#### How will we get there?

This is an area of concern and needs to be better developed. A TCO model needs to be developed. Currently technology cost are spread among, curriculum, technology and building budgets. There is currently no substantial collection of TCO information or TCO model. The district also lacks a substantial replacement cycle or goal.

Investigation into replacement cycles and thin client alternative are currently under investigation by the Technology Coordinator. Once a plan is found, it will be taken to the technology committees and the superintendent and treasurer for adoption.

#### How will we know we are getting there?

We will be investigating The Consortium for School Networking, TCO model of "Taking TCO to the Classroom" project to provide our school and technology leaders with tools to help them estimate the Total Cost of Ownership. Our helpdesk is currently our method of determining the tech departments TCO, however it does not take into account the cost of the teacher time and other variable outside of the tech department.

#### How will we sustain focus and momentum?

The plan will be reviewed annually by the Technology Planning Committee. All strategies and action steps, data gathered from the BETA, updates to the CIP/SIP, staff development evaluations, staff surveys, and district standardized tests results will be considered in changes needed to improve the overall tech plan.

The revised Technology Plan will be presented to the Superintendent and curriculum director for approval.

## Budget and Planning

### 5.0 Budget

Budgeting is an essential component of any planning process. In Phases 1-4 of your tech plan, you have identified technology strategies that will help you 1) align with academic content standards, 2) administer your technology plan, and 3) implement your technology plan. Review Phases 1-4 and determine the costs associated with these technology strategies. In trying to effectively budget these technology costs, the planning team will need to eliminate redundancies and overlaps in the identification of technology components and phase in expenditures over the plan life-cycle.

	Where are we now?	Where do we want to go?			
	Current Fiscal Year	2006-2007	2007-2008	2008-2009	Total
Network/Telecommunications	20,000	20,000	20,000	20,000	60,000
Access to Technology	5,000	5,000	5,000	5,000	15,000
Shareholder Access to Educational Informational Applications	0	0	0	0	0
Educational Software	32,000	33,600	35,280	37,044	105,924
Security	0	0	0	0	0
Technology Staffing/Support	341,158	358,215	376,126	394,933	1,129,274
Professional Development	3,000	3,000	3,000	3,000	9,000
Consumables	22,467	23,590	24,713	25,836	74,139
Additional	0	0	0	0	0
<b>Total</b>	<b>423,625</b>	<b>443,405</b>	<b>464,119</b>	<b>485,813</b>	

*Additional Items*

NONE

*Budget process details*

Budgets are set each year by the Superintendent and the board. Highland has a strategic plan in place that guides and focuses our budget and resources.

**How will we get there?**

These expenses will be funded through a combination of eTech funds, local levy issues, private and public grants.