

# **Educational Technology Plan for Winton Woods City SD - 044081**

**School Years:**

**2009-10**

**2010-11**

**2011-12**

**eTech Ohio Certified on Jun 29, 2009**

**Certification Period: July 1, 2009 - Jun 30, 2012**

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

## **TABLE OF CONTENTS**

### **Pre-Planning**

- 1.0 Establish Technology Planning Committee
- 1.1 Overview of TPT Planning Framework
- 1.2 Review Current Technology Plan
- 1.3 Vision/Mission

### **Curriculum Alignment & Instructional Integration**

- 2.1 How Are You Making Ohio's Technology Standards An Official Part Of Your District's Curriculum?
- 2.2 How Will You Be Using Technology to Improve Teaching and Learning in English/Language Arts?
- 2.3 How Will You Be Using Technology to Improve Teaching and Learning in Fine Arts?
- 2.4 How Will You Be Using Technology to Improve Teaching and Learning in Foreign Language?
- 2.5 How Will You Be Using Technology To Improve Teaching and Learning In Mathematics?
- 2.6 How Will You Be Using Technology to Improve Teaching and Learning in Science?
- 2.7 How Will You Be Using Technology to Improve Teaching and Learning in Social Studies?
- 2.8 How Are You Teaching Students About Technology Itself?

### **Technology Policy, Leadership and Administration**

- 3.1 Analyzing District Education Technology Policies
- 3.2 Analyzing District Leadership
- 3.3 Technology Leader/Coordinator Time Commitments

### **Technology Infrastructure, Management and Support**

- 4.1 Networking, Internet & Telecommunications
- 4.2 Access to Technology
- 4.3 Stakeholder Access to Educational Information & Applications
- 4.4 Educational Software
- 4.5 Security
- 4.6 Technology Support and Management
- 4.7 Total Cost of Ownership

### **Budget and Planning**

- 5.0 Budget

### **Appendix A - Additional Documents**

## Pre-Planning

### 1.0 Establish Technology Planning Committee

Curriculum Coordinator  
 Instructional Integrationist  
 Library/Media Specialist  
 Teacher  
 Technology Coordinator  
 Technology Support

Approvers:

Rhonda Hobbs (Technology Coordinator/Director)  
 Camille Nasbe (Superintendent)  
 Tom Golinar (Treasurer)

### 1.1 Overview of TPT Planning Framework

eTech Ohio's Technology Planning Tool, 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

To what goals and strategies does your current plan commit to advance the use of technology to enhance teaching and learning?

Are any of these goals no longer relevant?

What goals and strategies were met, and to what degree of success?

In 1998, the Winton Woods City School community passed a permanent improvement levy which allocated an annual budget towards technology. With an annual allocation technology integration was feasible. Our teachers have been provided notebook computers with wireless access throughout our district for electronic gradekeeping and utilization as an instructional resource. This was the first time that the district provided a dedicated workstation for teachers. As part of a larger, community developed, district strategic plan, we implemented an online gradebook package. Parents have the ability to access student grades and view homework assignments through the internet. We have a true home to school link addressing one of our district goals by increasing parental involvement. We believe that increased parental involvement will support higher student achievement. When our technology plan was written it was a realistic undertaking for our district. We have made progress in many of the areas initially addressed. Professional development was another integral piece of our technology plan. The past few years, our district has implemented a teacher whiteboard program. Selected teachers were required to attend a week long professional development session in exchange for a Promethean whiteboard. This year, our district utilized the same dollars allocated for whiteboards as a teacher technology grant opportunity. Many creative uses for technology in the classroom have emerged through this grant process. A new need that has emerged is the usage of instructional data decision making. We are looking for ways to bring

all of our data pieces together to paint a student profile in a very easy way for our teachers to make daily instructional classroom decisions as well as provide overall building and district level data on a quarterly basis prior to the high stakes testing time.

The district has formulated a technology advisory committee that is charged with the annual evaluation of the technology plan after the high stakes achievement data has been returned to the district. Additionally, the Director of Technology meets weekly with the Curriculum Directors. Modifications to the curriculum alignment based on student achievement level will be considered. The Director of Technology will be responsible for updating the plan.

Please address the following as you plan for the next three years. Be sure to record your conclusions for reflection.

Were there any unexpected outcomes or new needs that emerged?

Which goals and strategies still need to be addressed? How will the technology committee address them?

We have met many of our district technology initiatives as outlined in our current plan. However, these initiatives need to be continued, updated and new initiatives need to be outlined. At this time, our staff members have greatly grown in the area of utilizing technology for classroom management and a portion have grown with utilizing technology as a instructional methodology.

One of our greatest successes has been in the area of whiteboard board implementation. We are heading into our third year of interactive whiteboard usage for selected staff members. The concern arising is inconsistent implementation. For example, a student may be instructed by a whiteboard teacher in 3rd grade, and moved to a classroom without the equipment in 4th grade. To solve this concern, we are looking at placing whiteboards across the curriculum - so that the maximum number of students will be taught one subject by at least one staff member with type of resource. This will take several years to complete as our budget is limited. Even though the whiteboard implementation has created some concern for inconsistent implementation, we have placed the expensive resources in highly used areas. In other words, the boards were placed where we are receiving the highest return on our investment.

## **1.3 Vision/Mission**

### **A. Vision**

Winton Woods Technology Center has a vision to align the use of technology and curriculum in order to prepare our students for global competition with 21st century skills by giving students the tools and knowledge to succeed in this highly competitive fast paced information age along with the technical communication skills to achieve a broad spectrum of dreams.

### **B. Mission**

The mission of the Winton Woods City Schools Technology Department is to deploy and maintain a foundation to support programs and departments, to increase efficiency while reducing costs and to provide staff with accurate data for informed decision making regarding instructional processes.

## Curriculum Alignment & Instructional Integration

### 2.1 How Are You Making Ohio's Technology Standards An Official Part Of Your District's Curriculum?

This section is a prerequisite for Sections 2.2 through 2.8 and should be considered as a separate task with a different goal. The goal of this section is to describe how your district is including Ohio Technology Standards into the district's curriculum. Regardless whether your district calls it a "Graded Course of Study," "Curriculum Map," or something else – all districts have some form of documentation that spells out what is expected to be taught. The content standards for technology should be written into these documents so they are interwoven with the content standards for math, science etc. For Educational Service Centers (ESCs), please identify how you are assisting your contracted schools in aligning their curriculum to technology standards.

The academic content standards, known as curriculum, describe what to teach. Technology standards should be embedded within the content from other disciplines in order to deliver the curriculum in a highly effective and motivational way.

- Using the grid below, please indicate the status of your district's efforts to embed Ohio's Technology Standards into the content standards for each curricular area. In the left column, "Where Are We Now?," please select "Not Started," "In Progress," or "Complete" for each curriculum area listed. In the right column, "Where Do We Want To Go?" please select the school year you completed or plan to complete this process.

	Where are we now?	Where do we want to go?
English Language Arts	In Progress	2011-12
Fine Arts	In Progress	2011-12
Foreign Language	In Progress	2011-12
Mathematics	In Progress	2011-12
Science	In Progress	2011-12
Social Studies	In Progress	2011-12
Technology (specific course)	In Progress	2011-12
Other Content Areas	N/A	2011-12

- In the textboxes below, please provide brief but comprehensive descriptions of how you are writing Ohio's Technology Standards into all of your curriculum areas. How are you measuring progress toward that goal, and how will you sustain a culture of technology integration into the future?

#### How will we get there?

In focusing on technology alignment in content areas, we have looked specifically at Language Arts, Science and Mathematics as the first areas for alignment. These content areas have been selected as they represent the district's instructional focus based upon Ohio Achievement Test (OAT) data and the District Level/Building Level Ohio Improvement Plan. Ways to support and enhance the curriculum in these content areas will best serve the students at Winton Woods City Schools.

In 2007, we appointed two Technology Integration Specialists at the Elementary (Grades 3-4) and the Intermediate (Grades 5-6) school. The specialists were charged with the task to coordinate technology grade level technology projects that support or enhance the curriculum in the classroom. We feel that these grade-level technology projects will ensure that every Winton Woods City School student will solve real life problems, using real life tools.

In 2008, the Technology Department physically moved their offices next to the Department of Teaching and Learning. Outwardly, this was a move of office location, inwardly, this move is allowing for high collaboration between the Curriculum Directors and the Technology Director in support of integrating technology into instruction district-wide. We are both learning from each other. Additionally, the Director of Technology is participating in classroom level walkthroughs in a coaching capacity to provide professional development support to certificated staff members. This cooperative teaming and planning will continue.

A second strategy is the utilization of collaborative resources. I feel one way to ensure that technology is being integrated into the curriculum is if technology standards, technology resources and grade level programs are added to the district curriculum pacing guides. We are looking at a data warehousing system

which will provide feedback on local and state assessments, linking student data to the instructional resources. While D3A2 is a wonderful tool, it is not allowing us to import our local short cycle assessment data. We are in need of a tool that takes us beyond admiring the data into what we can do about changing the data. We would like to tie all instructional resources together with the benchmarks/standard comparable data. The power of collaboration will enable our teachers to work smarter. The wiki will provide them an area to share best practices and lesson plans. By leveling the starting foundation for teachers, it is our hope that they will add new innovations in the teaching and learning process.

To support technology integration initiatives, the district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology, sharing of best practices and provide collaboration between professionals.

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

As part of our initial plan, we would like to perform a systems audit in order to get a baseline to measure our progress. We will utilize other data sets such as the BETA survey information from teachers, teacher self-assessment tools as well as student achievement as measured by the standardized tests. Our Ohio Improvement Plan (OIP) district and building plans call for regular monitoring of classroom instruction. As part of this plan, we will have evidence as to whether or not the Ohio Technology Standards as being aligned with the Core Content Area Standards.

Another indicator we will utilize to monitor curriculum alignment includes grade-level student projects. The product created through the grade-level projects can be evaluated to ensure alignment.

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

I would like to see our Technology Advisory Committee charged with the assessment of and progression of technology integration across our district.

Our district is committed to providing our staff with professional development experiences through the informal coaching walkthrough process, waiver day PD, TTUG (Transforming Technology Users Group), before and after school workshops and summer training.

During the Spring of each year, teachers have the opportunity to apply for internal technology mini-grants, which brings technology to their classroom. As a part of that process, they are also provided professional development on the utilization of these new technologies.

As a checkpoint, when we review our data sets we will determine if we are heading in the right direction based upon progress being made or we will re-evaluate our direction.

## **2.2 How Will You Be Using Technology to Improve Teaching and Learning in English/Language Arts?**

The goal of section 2.2 is to identify the major elements of your district's plans to use technology to enhance teaching and learning in English/Language Arts at the elementary, middle and secondary levels over the next three years.

The primary objective is that you provide a brief description of two or three broad-based practices being utilized by the majority of your district's teachers to use technology to improve teaching and learning at the elementary, middle and secondary levels. For example, if all or most of your fifth through seventh grade English/Language Arts teachers are requiring students to conduct internet research or produce multimedia presentations on a regular basis; this would qualify as a broad-based practice. But if only a fraction of your teachers are regularly using these tools in the classroom – do not portray it as a broad-based practice.

Please feel free to include information about significant technology integration practices which are, by nature, not broad-based. For example, if a high school science teacher is using simulation software to allow students to conduct virtual experiments which are too dangerous to replicate in the classroom or lab; please indicate this in the Science curriculum area at the high school level only.

Using the ACOT Scale and the grid below, indicate your school's current level of effective technology integration in the English/Language Arts instructional process, as well as your target levels for improvement. If your responses

fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

### Current Levels of Technology Integration in English/Language Arts

**1.0 Entry** - Learn the basics of using 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 technology as needed.

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

	Where are we now?	Where do we want to go?
Pre-K	2.0	4.0
K-2	2.0	4.0
3-4	2.0	4.0
5-7	2.5	5.0
8-10	2.5	5.0
11-12	2.5	5.0

### How will we get there?

This past year, the K-2 building has implemented a new reading core program. Along with this program, we have a multitude of online resources for students, teachers and parents. It is our goal to promote the usage of these online resources to students, parents and support teachers using the Promethean interactive whiteboards. This reading core program will be piloted in Grades 3-6. This allows us for concentrated professional development efforts for release days, workshops and embedded classroom PD. This new reading core program supports our Ohio Improvement Plan to improve student achievement in Reading as evidenced on the high stakes state tests. Additionally, the new core reading program includes differentiation activities for all stakeholders from the gifted learner, ESL learner, to the special needs learner. These differentiation activities include computer activities that will promote learning. The Director of Technology will support these efforts by providing professional development activities in the utilization of online resources. Additionally, speakers and headsets will be distributed to elementary classrooms to allow students to quietly listen to audio recordings of the lesson materials.

During the 2006-07 school year, at the early literacy levels, the district has purchased Leap Frog technology. The Leap Frog components include a "Ready, Set, Leap" and "Literacy Center" that provides engaging and individualized instruction. This award-winning program combines multisensory technology with research-based curriculum to provide effective learning experiences for every student. The Link to Lessons software is easy to use and provides the teacher with many multisensory activities. Additionally, it monitors student progress (individually as well as class-level). Based upon the assessment results, customized lesson plans are generated based on student need. The hands-on centers provide excitement and differentiated instruction as well as connective feedback.

WWCS Secondary students will be exposed to one grade level projects through the English classroom. This grade level project will encompass a problem/project based learning activity that will be cross-curricular in nature and involve internet research through the development of a student product. Additionally, we would like to explore the usage of collaborative technologies such as blogs and forums to support the writing initiative as outlined in the district Ohio improvement plan.

Lastly, instructional staff will be trained in the utilization of data driven decision making. Programs will be available for staff members to either assess students against the standards online or scan in results for data analysis on both local short cycle assessments as well as high stakes state tests. Staff have the ability to follow a student through progress monitoring, while administration will have the ability to analyze whether or not programs and expenditures are effective. When analyzing data, teachers will have easy linkages to instructional resources that support the weakest areas.

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

The main indicator of success will be evident through increased student achievement as measured by district assessments and standardized testing. As part of the Ohio Improvement Plan, we will be monitoring classroom

instruction in a coaching capacity. Targets have been identified and will be measured. Student sample work will be taken and evaluated. If no progress is evident, we will have to review program uses, and professional development strategies.

Professional development activities shall include a plethora of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

With the development of grade level projects, we will be providing professional development to educators utilizing technology to support the instructional process. This professional development will be classroom embedded.

To encourage development and advanced practices, the district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology and provide collaboration between professionals.

## 2.3 How Will You Be Using Technology to Improve Teaching and Learning in Fine Arts?

The goal of section 2.3 is to identify the major elements of your district's plans to use technology to enhance teaching and learning in Fine Arts at the elementary, middle and secondary levels over the next three years.

The primary objective is that you provide a brief description of two or three broad-based practices being utilized by the majority of your district's teachers to use technology to improve teaching and learning at the elementary, middle and secondary levels. For example, if all or most of your fifth through seventh grade Fine Arts teachers are requiring students to conduct internet research or produce multimedia presentations on a regular basis; this would qualify as a broad-based practice. But if only a fraction of your teachers are regularly using these tools in the classroom – do not portray it as a broad-based practice.

Please feel free to include information about significant technology integration practices which are, by nature, not broad-based. For example, if a high school science teacher is using simulation software to allow students to conduct virtual experiments which are too dangerous to replicate in the classroom or lab; please indicate this in the Science curriculum area at the high school level only.

Using the ACOT Scale and the grid below, indicate your school's current level of effective technology integration in the Fine Arts instructional process, as well as your target levels for improvement. If your responses fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

#### Current Levels of Technology Integration in Fine Arts

- 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	1.5	3.5
5-8	3.0	5.0
9-12	4.0	5.0

**How will we get there?**

Winton Woods City Schools is steeped into tradition with their fine arts program. We are well known for our excellent music program. Most recently, our students traveled to Beijing, China to sing in the pre-Olympic ceremony games in 2008.

The WWCS fine arts teachers have access to, and are currently using, a variety of technology resources to enhance their classroom instruction including, but not limited to, the use of computers, ipods, interactive Promethean whiteboards, projectors, digital cameras, midi keyboards, software (composing and mixing music, creating graphic images), online resources (video streaming and internet access).

At the Elementary level, WWCS students deepen their cultural awareness by researching various styles and genres of music and art from foreign countries. Many teachers use projection devices to expose our students to various works of art and bring musical performances to their ears. Students use the word processor to create informational reports about their respective art projects.

In our Middle School, WWCS students utilize software to compose, arrange, notate and print sheet music. We are investigating the usage of web-based accompaniment through a web-subscription for our students. Our Middle School Fine Arts teachers use video streaming and internet sites to introduce and reinforce concepts. Students use the word processor to create informational reports about their respective art projects.

At our High School, WWCS students utilize a music lab to learn music theory. Students in the music program have access to computer workstations with integrated midi-keyboards and software they are able to use to compose, arrangement, notate and print sheet music. We are also investigating the usage of web-based accompaniment through a web-subscription at the High School as well. The usage of interactive whiteboards at the High School promotes musical sight reading skills and learning progressive musical elements. Student response systems (Activotes/ActivExpressions) are used with students as a quick assessment in identifying rhythmic patterns and making connections in music between what is seen and what is heard.

We would like to invest in a multimedia Apple mobile lab for our fine arts program (Music, Video Production and Art). The computers and software required for these classes are complimentary in nature and could be easily shared. We are looking for ways to overcome the challenge of blocked music-based websites by providing students with ipods that contain a magnitude of music from various artists and genres to be used when researching musicians. We would also like to pilot the usage of podcasting with the students. We already have many of the resources available to create podcasts. This is a project that can come to life with classroom-embedded professional development.

As we bring this multimedia lab as a resource to our district, the Director of Technology will coordinate professional development on the usage of the new iLife programs through workshops and embedded classroom PD. Through the use of My PDEExpress, participants will sign up for related PD activities and receive electronic certificates of attendance.

Professional development activities shall include a plethora of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

The main indicator of success will be evident through increased student achievement as measured by district assessments and standardized testing. Additional measures would include students developing a sense of autonomy with the skills they are learning through these fine arts classes. When new products are created through innovative uses, we will see students transfer this knowledge to their other core curricular classes in a similar manner. PowerPoint presentations will no longer be the only means of student presentations. The district fine arts facilitator and/or Director of Curriculum will be responsible for evaluating the outcome. If no progress is evident, we will have to review program uses, and professional development strategies.

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

Once annually teachers are offered an opportunity to apply for a \$3,000 internal grant. Instead of the Technology Director taking a cookie cutter approach to infusing technology into the curriculum, (ie - buying Promethean boards for every classroom) teachers are provided an avenue in which they can be innovative and creative. Teachers complete an extensive application process and a selected group is called back for a formal presentation. The group is again narrowed and final grants are awarded to the most creative and innovative ways technology will be used in the classroom. The winning applications are posted to our intranet for all to see ways in which technology is being utilized in classrooms across our district.

The district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology and provide collaboration between professionals.

Additionally, it will be important for the Director of Technology to meet regularly with department facilitators and the Director of Curriculum to coordinate initiatives, align with the Building Leadership Team (Ohio Improvement Plan) and plan for budget and professional development needs to support these initiatives.

## 2.4 How Will You Be Using Technology to Improve Teaching and Learning in Foreign Language?

The goal of section 2.4 is to identify the major elements of your district's plans to use technology to enhance teaching and learning in Foreign Language at the elementary, middle and secondary levels over the next three years.

The primary objective is that you provide a brief description of two or three broad-based practices being utilized by the majority of your district's teachers to use technology to improve teaching and learning at the elementary, middle and secondary levels. For example, if all or most of your fifth through seventh grade Foreign Language teachers are requiring students to conduct internet research or produce multimedia presentations on a regular basis; this would qualify as a broad-based practice. But if only a fraction of your teachers are regularly using these tools in the classroom – do not portray it as a broad-based practice.

Please feel free to include information about significant technology integration practices which are, by nature, not broad-based. For example, if a high school science teacher is using simulation software to allow students to conduct virtual experiments which are too dangerous to replicate in the classroom or lab; please indicate this in the Science curriculum area at the high school level only.

Using the ACOT Scale and the grid below, indicate your school's current level of effective technology integration in the Foreign Language instructional process, as well as your target levels for improvement. If your responses fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

### Current Levels of Technology Integration in Foreign Language

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	2.0	4.0
5-8	2.0	5.0
9-12	2.0	5.0

### How will we get there?

WWCS has adopted a World Class Education philosophy and started a Chinese program at the elementary level.

We have received some financial support through grants for infusing technology in the foreign language instruction. This equipment includes computers, ipods, digital cameras, video cameras, projectors and interactive whiteboards.

Students will learn about culture, daily life and language while they problem solve with students from foreign lands. We will be piloting the usage of a web subscription called iEARN.

Through the usage of ipods in the Spanish classroom, students will listen to music and language to assist in learning the culture and language.

To support our ESL population, we would like to use foreign language translators to assist them in learning English. This will put these students on a even playing field as they can turn in homework assignments and papers translated from their language into English as they transition in their language learning.

We believe that multimedia resources are paramount to the foreign language classroom. Students can see a picture and click on a link to hear the word correctly pronounced over and over. Use of digital photography can assist the instructor when introducing new vocabulary by showing students pictures of the object. Teacher made websites can also pull many resources together for student exploration. Through the use of video streaming, students can virtually see and learn!

As with any new technology introduced, teachers will require professional development in the usage of tools available. As part of the internal grant process, IPODs are being purchased for the MS Spanish and Chinese classrooms.

Professional development activities shall include a plethora of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

The district's vision encompasses a Global Education for our students. This vision seeks to prepare our students for the 21st century by empowering them to communicate in foreign languages, demonstrate knowledge of world cultures and develop an appreciation of cultural diversity, and preparing them for a competitive future.

By using technology in the foreign language classroom, we will be exposing students to cultures in ways that they would not be able to experience without technology in place, and that they would be more engaged in the learning process, preparing them to be successful in the 21st century global society.

The main indicator of success will be evident through increased student achievement as measured by district assessments. Additional methods used to measure student progress include products that demonstrate the usage of technology resources. If no progress is evident, we will have to review program uses, and professional development strategies.

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

Once annually teachers are offered an opportunity to apply for a \$3,000 internal grant. Instead of the Technology Director taking a cookie cutter approach to infusing technology into the curriculum, (ie - buying Promethean boards for every classroom) teachers are provided an avenue in which they can be innovative and creative. Teachers complete an extensive application process and a selected group is called back for a formal presentation. The group is again narrowed and final grants are awarded to the most creative and innovative ways technology will be used in the classroom. The winning applications are posted to our intranet for all to see ways in which technology is being utilized in classrooms across our district.

The district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose

our staff to current trends in technology and provide collaboration between professionals.

Additionally, it will be important for the Director of Technology to meet regularly with department facilitators and the Director of Curriculum to coordinate initiatives, align with the Building Leadership Team (Ohio Improvement Plan) and plan for budget and professional development needs to support these initiatives.

## 2.5 How Will You Be Using Technology To Improve Teaching and Learning In Mathematics?

The goal of section 2.5 is to identify the major elements of your district's plans to use technology to enhance teaching and learning in Mathematics at the elementary, middle and secondary levels over the next three years.

The primary objective is that you provide a brief description of two or three broad-based practices being utilized by the majority of your district's teachers to use technology to improve teaching and learning at the elementary, middle and secondary levels. For example, if all or most of your fifth through seventh grade Mathematics teachers are requiring students to conduct internet research or produce multimedia presentations on a regular basis; this would qualify as a broad-based practice. But if only a fraction of your teachers are regularly using these tools in the classroom – do not portray it as a broad-based practice.

Please feel free to include information about significant technology integration practices which are, by nature, not broad-based. For example, if a high school science teacher is using simulation software to allow students to conduct virtual experiments which are too dangerous to replicate in the classroom or lab; please indicate this in the Science curriculum area at the high school level only.

Using the ACOT Scale and the grid below, indicate your school's current level of effective technology integration in the Mathematics instructional process, as well as your target levels for improvement. If your responses fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

### Current Levels of Technology Integration in Mathematics

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	1.0	2.0
K-2	2.0	3.5
3-4	2.0	4.0
5-7	2.0	4.0
8-10	2.0	4.0
11-12	3.0	4.5

### How will we get there?

This past year, students in grades K-6 have piloted a new mathematics program. Along with this program, we have a multitude of online resources for students, teachers and parents. It is our goal to promote the usage of these online resources to students, parents and support teachers using the Promethean interactive whiteboards. Being a single mathematics philosophy / program, allows us for concentrated professional development efforts for release days, workshops and embedded classroom PD. This new program supports our Ohio Improvement Plan to improve student achievement in mathematics as evidenced on the high stakes state tests.

We are seeking differentiated instructional resources to meet the needs of all learners from the gifted learner to the special needs learner. We will look for a virtualized instruction to fill the gaps for our students with high mobility.

We will continue to support the usage of Promethean interactive whiteboards to bring math lessons to life for our students through the usage of virtual manipulatives and hands-on experiences. The usage of student response systems will enhance the assessment time and allow for a teacher to immediately reteach if the students aren't performing as expected.

Lastly, instructional staff will be trained in the utilization of data driven decision making. Programs will be available for staff members to either assess students against the standards online or scan in results for data analysis on both local short cycle assessments as well as high stakes state tests. Staff have the ability to follow a student through progress monitoring, while administration will have the ability to analyze whether or not programs and expenditures are effective. When analyzing data, teachers will have easy linkages to instructional resources that support the weakest areas of their learners.

Professional development activities shall include a plethora of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

The main indicator of success will be evident through increased student achievement as measured by district assessments and standardized testing. As part of the Ohio improvement Plan, we will be monitoring classroom instruction in a coaching capacity. Targets have been identified and will be measured. Student sample work will be taken and evaluated. If no progress is evident, we will have to review program uses, and professional development strategies.

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

With the development of grade level projects, we will be providing professional development to educators utilizing technology to support the instructional process. This professional development will be classroom embedded.

To encourage development and advanced practices, the district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology and provide collaboration between professionals.

## **2.6 How Will You Be Using Technology to Improve Teaching and Learning in Science?**

The goal of section 2.6 is to identify the major elements of your district's plans to use technology to enhance teaching and learning in Science at the elementary, middle and secondary levels over the next three years.

The primary objective is that you provide a brief description of two or three broad-based practices being utilized by the majority of your district's teachers to use technology to improve teaching and learning at the elementary, middle and secondary levels. For example, if all or most of your fifth through seventh grade Science teachers are requiring students to conduct internet research or produce multimedia presentations on a regular basis; this would qualify as a broad-based practice. But if only a fraction of your teachers are regularly using these tools in the classroom – do not portray it as a broad-based practice.

Please feel free to include information about significant technology integration practices which are, by nature, not broad-based. For example, if a high school science teacher is using simulation software to allow students to conduct virtual experiments which are too dangerous to replicate in the classroom or lab; please indicate this in the Science curriculum area at the high school level only.

Using the ACOT Scale and the grid below, indicate your school's current level of effective technology integration in the Science instructional process, as well as your target levels for improvement. If your responses fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

### Current Levels of Technology Integration in Science

- 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	1.0
K-2	1.0	2.0
3-5	3.0	4.0
6-8	3.0	4.0
9-10	3.0	4.0
11-12	3.0	4.5

### How will we get there?

As part of the district level Ohio Improvement Plan, our district has added a goal addressing Science Achievement.

The Winton Woods City Schools' Science curriculum has recently been paced utilizing a spiraling approach to grade level concepts and ways of thinking. We have been fortunate enough to hire a Science Lab teacher for our students in grades 3-6 as part of our reconfiguration process.

Students in the elementary level are exposed to hands-on activities in the science lab and outdoor land lab experience. With the addition of interactive whiteboards and ceiling mounted projectors, data collecting devices (probes) students will be explore science concepts in a hands-on approach and compile the data using technology. As part of a grade level quarterly technology project, students explore the similarities of differences of rocks, animals and simple machines.

Students in the middle/high school level will be introduced to an Engineering background through the Project Lead the Way initiative. We have selected Design and Modeling as well as Robotics and Animation to support the integration of mathematics and engineering concepts into lessons. We are eager to build business partnerships to combine lecture and problem/project based learning to provide students with real-life examples of how science, technology, engineering and mathematics are used in the workforce.

Professional development activities shall include a plethora of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

The main indicator of success will be evident through increased student achievement as measured by district assessments and standardized testing. As part of the Ohio Improvement Plan, we will be monitoring classroom instruction in a coaching capacity. Targets have been identified and will be measured. Student sample work will be taken and evaluated. If no progress is evident, we will have to review program uses, and professional development strategies.

### How will we sustain focus and momentum?

With the development of grade level projects, we will be providing professional development to educators utilizing technology to support the instructional process. This professional development will be classroom embedded.

To encourage development and advanced practices, the district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology and provide collaboration between professionals.

## 2.7 How Will You Be Using Technology to Improve Teaching and Learning in Social Studies?

The goal of section 2.7 is to identify the major elements of your district's plans to use technology to enhance teaching and learning in Social Studies at the elementary, middle and secondary levels over the next three years.

The primary objective is that you provide a brief description of two or three broad-based practices being utilized by the majority of your district's teachers to use technology to improve teaching and learning at the elementary, middle and secondary levels. For example, if all or most of your fifth through seventh grade Social Studies teachers are requiring students to conduct internet research or produce multimedia presentations on a regular basis; this would qualify as a broad-based practice. But if only a fraction of your teachers are regularly using these tools in the classroom – do not portray it as a broad-based practice.

Please feel free to include information about significant technology integration practices which are, by nature, not broad-based. For example, if a high school science teacher is using simulation software to allow students to conduct virtual experiments which are too dangerous to replicate in the classroom or lab; please indicate this in the Science curriculum area at the high school level only.

Using the ACOT Scale and the grid below, indicate your school's current level of effective technology integration in the Social Studies instructional process, as well as your target levels for improvement. If your responses fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

### Current Levels of Technology Integration in Social Studies

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	1.0
K-2	2.0	3.0
3-5	2.0	3.0
6-8	3.0	5.0
9-10	3.0	5.0
11-12	3.0	5.0

### How will we get there?

The purpose of a social studies program is to teach students the content knowledge, intellectual skills, and civic values necessary for fulfilling the duties of citizenship in a participatory democracy. What better way to begin this educational learning experience than by allowing students to fully participate in their learning. Technology is the gateway to allow for this participation.

Whenever possible, students should have opportunities to learn social studies in real-world contexts. We are looking at piloting a simulation experience through a program called CHOICES - through Brown University for our high school classrooms. This will help students to make meaningful personal connections between new information that they are learning and their own experiences. Through video streaming and virtual field trip experiences, students who have never had certain experiences will be able to gain background knowledge to help them develop contextual frameworks for a broader understanding.

Through our district provided wiki, teachers and administrators can share best practices in the utilization of technology in the Social Studies content area. Our district has an uneven distribution of Promethean interactive whiteboards in our classrooms which yields inconsistent technology integration. We will continue to develop capacity of our certificated staff by providing professional development and hardware opportunities over time as funding becomes available. We have shared sets of student response systems that would allow for real time voting and quick assessment checks. All of these instructional resources provide a higher level of student engagement which leads toward increased student achievement. Lastly, allowing for differentiation of classroom instruction, we are looking for a virtual curriculum supplements to fill in the gaps for our students.

Professional development activities shall include a plethora of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

The main indicator of success will be evident through increased student achievement as measured by district assessments and standardized testing. As part of the Ohio Improvement Plan, we will be monitoring classroom instruction in a coaching capacity. Targets have been identified and will be measured. Student sample work will be taken and evaluated. If no progress is evident, we will have to review program uses, and professional development strategies.

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

With the development of grade level projects, we will be providing professional development to educators utilizing technology to support the instructional process. This professional development will be classroom embedded.

To encourage development and advanced practices, the district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology and provide collaboration between professionals.

## **2.8 How Are You Teaching Students About Technology Itself?**

The goal of Phase 2.8 is for district technology planning staff to describe your district's efforts to teach students what they need to know and be able to do in order to meet Ohio's technology content standards.

**IMPORTANT NOTE:** Phase 2.8 is about technology as its own academic content standard and focuses on specific technology courses.

Phase 2.8 is the place to indicate what technology instruction you are offering at the elementary, middle and secondary levels. Examples of these "pure technology" courses would include, but are not limited to: career technology, library media, keyboarding, multi-media or digital video production, web page authoring, network administration, etc.

As you are considering how you will teach the technology academic content standards, consider reviewing your Comprehensive Continuous Improvement Plan (CCIP) goals and strategies.

#### **Activity**

Using the Apple Classroom of Tomorrow (ACOT) Scale and the grid below, indicate your school's current level of effective technology integration specifically concerning technology courses, as well as your target levels for improvement. If your responses fall between whole numbers, such as between 3.0 and 4.0, feel free to use .5 increments such as 3.5.

#### **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	1.0
K-2	2.0	3.0
3-5	3.0	4.0
6-8	3.0	4.0
9-10	3.0	4.5
11-12	3.0	4.5

### How will we get there?

WWCS Students in Grades 3-6, through technology classes are engaged in activities that promote technology literacy while making a logical connection between the tech standards and the standards in other content areas such as math, science, language, social studies, the arts, and such.

At this Elementary level (Grades 3 and 4), our technology curriculum focuses primarily on the ISTE Student standards- as well as the Ohio Technology Content Standards in support of the core curriculum. This is taught primarily through project-based assignments utilizing the main productivity tools such as word processing, spreadsheets, databases, and presentation software.

As students enter into our Intermediate School (Grades 5-6), they continue to build upon the ISTE Student standards through project based assignments. Additional technology opportunities such as video making, greenscreening news content for the morning announcement, and logical sequencing using the ALICE program are introduced at this level. As an after school activity, we recently began a LEGO robotics program. We will be growing this initiative at the Middle School in the 2009-2010 school year by adding a Project Lead the Way - Automation and Robotics class.

Our program continuum continues at Grade 7 with an IT Center 21: Business and Information Technology class which integrates a unique learning management system with standards-based curriculum via an interactive multimedia Delivery system with laboratory experiences. The curriculum includes foundational aspects of computers and IT with a focus on career development. The Core Units encompass, computer research, multimedia presentations, telecommunications and ethics, information management and evaluation, desktop publishing, word processing, computer graphics, spreadsheets, and databases.

In the school year 2009-2010, we will be adding a Project Lead the Way course for Grade 8 students with an emphasis in the area of Science. The modules added will be Design and Modeling and Automation and Robotics.

Our current High School program consists of several classes, Video Production I and II, and Computer Applications I, II and III. In the 2008-2009 school year, we added a Health Center 21: Health Science and Technology Education course which provides a health care foundations class with opportunities to explore, learn and practice, reflect and reinforce learning through collaborative projects that reinforce knowledge and skills through real-world scenarios.

In the 2009-2010 school year, we will be adding the first of several Project Lead the Way courses that will ultimate provide our students with a rich engineering background and college credit through a Engineering Design and Development Capstone Course at the end.

As we continue to move towards instructing our students with a 21st century skills foundation, we will need to continue to move closer towards a smaller computer to student ratio. Additionally, we need to provide our instructional staff professional development in the area of problem/project based learning methodology to assist students in forming the connection between real world experiences and the Ohio Content Standards.

Professional development activities shall include a pleuthoria of experiences from online video instruction, direct instruction, train-the-trainer model and embedded classroom support. All hours spent training will be

credited towards teachers LPDC hours. Hours will be documented utilizing the following methods. Subscription based online video content available via the internet has a log of time a user has spent online. Classroom support is logged via a helpdesk ticket system. Time spent in support is tracked via a ticket update. Sign-in sheets will be taken in any formal training situation and an exit assignment will be utilized for any district-wide training on waiver days.

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

The main indicator of success will be evident through increased student achievement as measured by district assessments and standardized testing. Additional methods used to measure student progress include increased usage of technology resources and the elimination/replacement of some technology classes at the higher levels as we move forward in the technology programming continuum. If no progress is evident, we will have to review program uses, and professional development strategies.

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

We have set standards for systems support. The highest priority of support is given to classes dependent on technology usage. Virtual classes as well as computer application courses are among the first serviced.

With the development of grade level projects, we will be providing professional development to educators utilizing technology to support the instructional process. Outstanding projects can be shared through a curriculum resource web storehouse. Certificated staff can evaluate lesson plans and submit enhanced revisions.

Once annually teachers are offered an opportunity to apply for a \$3,000 internal grant. Instead of the Technology Director taking a cookie cutter approach to infusing technology into the curriculum, (ie - buying Promethean boards for every classroom) teachers are provided an avenue in which they can be innovative and creative. Teachers complete an extensive application process and a selected group is called back for a formal presentation. The group is again narrowed and final grants are awarded to the most creative and innovative ways technology will be used in the classroom. The winning applications are posted to our intranet for all to see ways in which technology is being utilized in classrooms across our district.

The district has also formed a TTUG (Transforming Technology Users Group), in which we currently share best practices among ourselves. We are envisioning the growth of this group to include area districts as well as invite technology vendors in for demonstrations and mini professional development sessions. This will expose our staff to current trends in technology and provide collaboration between professionals.

## 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	Adoption	Transformation
B. District wide program providing data or administrative systems to schools (e.g., fiscal databases, student assessment results)	Exploration	Transformation
C. Technology-related facilities design, equipment and software	Awareness	Exploration
D. Technology acquisition and standards	Exploration	Transformation
E. Research and evaluation of educational technology initiatives	Adoption	Exploration
F. Development and dissemination of educational technology devices, applications and approaches	Adoption	Transformation
G. District funding for educational technology	Exploration	Exploration
H. Equity and access to technology	Adoption	Exploration

#### How do we get there?

Changes in technology policy arise from time to time when a situation arises. For example, when the district purchased laptops for teachers, we had a new situation for policy development. A policy was created at that time and adopted by the board of education. Throughout this past year, while operating under the newly created policy, it was determined that we needed to modify this policy. The process of policy development starts with the director of a specific department and brought to the attention of the district leadership team. The district leadership team will review the district's policies and recommend adoption or revision. The Compliance Officer spear-heads the district policies. The district regularly updates policy according to law changes/updates and in conjunction with a purchased service, Neola.

Additionally, as we implement new technology initiatives, we run into challenges that either need a work around or a policy modification. One of the most recent items involves the use of you tube in the classroom. You tube is currently filtered out and not accessible. However, there are many instructional purposes for using you-tube in the classroom. We have provided teachers with internet by-pass filter accounts that enable them view you tube items upon request. Whenever a teacher utilizes the by-pass account, the access is logged for review. The technology staff has the ability to review the logs for inappropriate access and can revoke the by-pass account.

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

Our organization will monitor policy development by empowering stakeholder groups. If parents and students login to our online gradebook package and no data is available, we will hear from them regarding the process. Administrator stakeholders will also monitor teacher usage by utilizing Progress Book instead of paper/report procedures for turning in grades to the front office. This monitoring simply exchanges the method administrators use to gather information.

Additionally, as new policies are implemented, after board adoption, they are available online to both internal and external stakeholders. At any time, should there be an issue with a policy, the district Compliance Officer will review the policy with the district leadership team for policy changes. If it is deemed that the policy needs updating, a new proposed policy will be introduced.

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

Neola is the organization that develops our policies that come out of legislature change. When required, our district modifies the basic Neola policy for our circumstances. Outside of the Neola cycle, our district adopted a new homeschool policy. I believe the adoption of this new policy developed a model for our future policy process.

The process was first started by researching surrounding district's homeschool policies. Studies were completed of success and failure of homeschool program offerings. Suggested language was assembled and all stakeholders had an opportunity to submit changes. Stakeholder groups contained, parents of homeschool students, district administration, building administration, teacher representatives, and athletic personnel. After the proposed language was developed, the new policy was introduced to the board of education. All stakeholder groups were then notified of the new policy language. The end result was that our district now offers part time enrollment to home schooled students.

### 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	Adoption	Exploration
B. Competencies/Standards (e.g. ISTE NETS-A)	Exploration	Transformation
C. Advocacy for technology	Exploration	Transformation
D. Measures and accountability for effective use	Adoption	Transformation
E. Role model in the use of technology	Adoption	Exploration
F. Professional development	Adoption	Exploration
G. Support for educational technology	Adoption	Exploration
H. Professional practice	Adoption	Exploration

#### How do we get there?

Technology is evident in the day to day district operations as well as the instructional program. All staff members are provided access to technology and there is an expectation to use technology in the operations and to support technology integration in the instructional program.

Technology is thoroughly embedded in every operation of the district. Our maintenance department generates work orders online through the use of Public School Works. Our food service department has a point of sale cash register computerized system that generates state reports and keeps accounting of the days sales. Our transportation department routes our busses effectively through computer usage as well as virtualizes routing changes in an attempt to keep expenditures at the lowest level. Our technology department services all staff members with an IP voice system, voice mail, email, centralized printers, individual and shared server storage, collaborative tools such as wikis and blogs as well as an online work flow system for addressing both instructional technology needs, and infrastructure support. Our information systems services ALL student related informational needs from state reporting to online gradebooks. Our media centers utilize an online library database to loan materials to staff and students and have internet kiosks for research. Our central office houses an online LPDC certification and professional development database which provides staff members with a transcript of all PD activities. Our board has implemented a cost savings measure and went to paperless board meetings increasing efficiency for all. All district staff members use electronic communication both internally and externally. Technology is utilized to support and reduce expenditures in the day to day operations.

Technology is highly evident in the district's instructional program. For example, our at risk students are provided a virtual education, allowing them to move at their own pace and receive immediate feedback on their performance. Many classes are taught with interactive whiteboards encouraging student engagement. Teachers have laptops and use electronic gradebooks as well as email to communicate with parents. Student

progress is monitored and tracked in online databases such as DIBELS and KAMICO. We continue to grow in the area of integrating the technology standards into the curriculum.

As part of the Ohio Improvement Process, we will be implementing a data warehouse program which will provide a student profile for administration and staff in order to make instructional decisions.

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

The district and building Ohio Improvement Plans have goals and timelines with regard to student achievement. The plans are monitored through the collection of data. It is through this data review that the effectiveness of the district's goals will be measured and evaluated. Progress will be monitored and plans will be adjusted should the action steps not meet the expectations of the district and buildings.

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

Extending the use of technology is an integral part of the district's planning process. We are always looking at ways to incorporate technology in both the day to day operations as well as instructional program to reduce expenditures as well as increase efficiency of staff members and increase achievement of students.

District staff members participate in e-Tech initiatives and the state conference as well as national tech conferences such as NECC. All staff members are encouraged to plug-into the TTUG local initiative. TTUG is empowered to share best practices and learn about new technology trends.

### **3.3 Technology Leader/Coordinator Time Commitments**

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

#### **How will we get there?**

The technology department has been recently moved next to the department of teaching and learning. The job description of the Director of Technology was changed last year to include a greater emphasis on strategic planning for technology integration into the Curriculum.

While it would be nice to hire technology integration specialists in each building. It is probably out of fiscally out of reach. In order to support the students, the tech coordinator's time would be spent directly with certificated staff members to support their integration needs in the classroom or during a technology-integrated lesson plan. Continued work side by side with the Curriculum Directors will be necessary to ensure integrated activities.

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

As student achievement climbs, more and more lesson plans have technology integrated and teachers collaborate on the intranet, we will know progress is evident. Additionally, if our department can generate additional grants, we will be able to try new emerging technologies to academically benefit our student population.

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

The technology coordinator at Winton Woods wears many hats. The Department of Technology was recently moved to the same building as the Department of Teaching and Learning. This was a very strategic plan to work

together embedding technology in every aspect of the curriculum at Winton Woods. The technology coordinator will require continued professional development in the area of technology curriculum integration. Any opportunity for integration PD should not be overlooked.

## Technology Infrastructure, Management and Support

### 4.1 Networking, Internet & Telecommunications

This section is designed to speak to the network/telecommunications infrastructure necessary to support the technologies in use by the district for administrative and instructional computing. These uses range from EMIS reporting, shared administrative applications, video on demand (VOD), voice over IP (VoIP) telephony, thin client server access, Internet research and others.

With a wide range of new, converging or expanding services relying heavily on a converged network, capacity planning is imperative to the success of subsequent strategies that use the network. For example, a network using thin client connectivity to servers, with heavy Internet access, file and print services, as well as voice over IP, will need careful network capacity planning to introduce video streaming technologies.

#### ACTIVITY 1:

Complete the portfolio of network services and telecommunications services provided. Indicate any changes that you plan to introduce. Use the following scale in answering "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 certain places.
- **Many** - This technology is pervasive throughout the district and/or building.

Use the following scale in answering "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	Some	Increase
File and Print Sharing	Many	No Change
Internet Traffic	Many	No Change
Video Conferencing (IP)	None	Researching
Video Conferencing (ATM)	None	No Change
Video On-Demand (local building/district server)	None	Researching
Video Streaming (Internet)	Many	Researching
Voice Communications - Voice over IP	Many	No Change
Voice Communications - Centrex/PBX	None	No Change
Remote Access (Dial-up/VPN) to School Resources	Some	Researching
Wireless	Many	No Change
Email	Many	No Change
Enterprise/Shared Applications (e.g., online grade book)	Many	No Change

#### ACTIVITY 2:

Discuss the impact of the network and telecommunications services activity above on the bandwidth requirements of the LAN, WAN and Internet connection. Record the impact on bandwidth below.

	What is the current impact?
LAN Bandwidth	Increase
WAN Bandwidth	No Changes
Internet Bandwidth	No Changes
Telephone Circuits	No Changes

### How will we get there?

#### Thin/Network Clients

In order to increase our thin client utilization, we will have it invest in upgraded servers and clients. We hope to utilize repurposed older desktops as thin clients in the future.

#### File and Print Sharing

We have currently outgrown our file storage capacity again. This school year (2008-09), we have had to implement student and staff quotas to manage our file storage resources. We are looking at growing our Storage Area Network (SAN) to add redundancy and thin clients.

#### Internet Traffic

We are currently connected to our ITC via a fiber network. We are currently dedicated at 250 meg. According to bandwidth statistics available from the ITC, we are not nearing capacity at this time and have growth capacity.

#### Video Conferencing (IP) vs . Video Conferencing (ATM)

We have no immediate plans for increasing our video conference (IP) capability, but are researching this technology.

#### Video On-Demand (local building/district server)

Our transportation department is researching the usage of integrated video on-demand systems on our busses. With our newest storage project (SAN implementation) - we have the storage space available on our district servers.

Additionally, we would like to add the capacity to record television shows and push them to the classroom via our ethernet network.

#### Video Streaming (Internet)

Today, we utilize a subscription service to [unitedstreaming.com](http://unitedstreaming.com) for our video streaming. This resource allows teachers to search, by ohio content standards & grade level for videos and other resources. We plan to continue this usage.

#### Voice Communications - Voice over IP

#### Voice Communications - Centrex/PBX

We currently have a VOIP phone system.

#### Remote Access (Dial-up/VPN) to School Resources

Several district personnel have inquired about the possibility of having remote access to our district technology resources. We are looking at our system capabilities and may consider web-access in the future.

#### Wireless

We are currently wireless in all of our instructional spaces. Some of our communities have expressed interest in Wi-Max or community-wide wireless integration. There are several benefits to the school district and our district families if this service should ever become available.

Email

We would like to expand email to select student groups in the near future.

Enterprise/Shared Applications (e.g., online grade book)

We want to utilize ways to communicate with our public via technologies such as twitter and/or mass calling systems.

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

One of our future projects involves the increased usage of intranet and collaboration technologies. Today our traditional means of communicating with stakeholders involves the usage of intranet postings, group emails and hard copy fliers. There are technology advisory committee members that communicate back with the building leadership and staff regarding technology initiatives.

We will know that we are on the right track when our usage patterns grow - beyond our limitations. It is an exciting problem for the technology department when our resources don't meet the needs our of community. In order to address this specific problem, we have invested in a firm foundation that can easily expand when we demonstrate an increased need.

Technically, we have graphs and charts available of our bandwidth utilization from the local ITC. This data can be reviewed daily and also when budgets are being set for future fiscal years to determine if additional capacity is required.

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

As part of our storage and server upgrade project, high availability was a key term for Winton Woods. Our request for proposal indicated that we sought a reliable and redundant network service. As a result, we are moving to a virtualized infrastructure. Our core servers, housing our district's applications and files are targeted for virtualization. Virtualization will offer our district the fullest usage of our district server's resources. Additionally, virtualized servers will allow us to pilot and instantly create new servers addressing new educational objectives whenever necessary without additional costs for hardware. We will have the ability to "try" something that we may never have tried in a traditional server environment. Regarding redundancy, our virtual environment will no longer be hardware dependent. When it is time to maintenance servers, we can "move" a virtual server to another hardware platform and perform the required maintenance. Down-time will be minimal. In the event of a hardware failure, we will also be able to perform the same "move" and will have our district back up and running within minutes of the outage. Our virtualized environment has the potential to respond to all of our future needs.

## 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/or district.

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

How will we get there?

We are fortunate enough to have wireless access district wide while providing a laptop for every teacher. We chose wireless connectivity and laptops for the following reasons: space concerns in the classroom, electrical requirements, drop location in the classroom, mobility, and switch port density. When architecting the wireless infrastructure, we added central management capability. We have all of the pieces in place to easily grow our wireless coverage for additional nodes.

While we want to increase our student to computer ratio to 1:1, we currently don't have the funding to do so. We believe that access to technology both in the district and at home will facilitate increased student achievement. Utilizing the teacher 1:1 laptop program as a model, we found it necessary to provide initial professional development as well as on-going technology professional development throughout the school year. With any new technology implementation, we aspire to bundle professional development along with it. Without proper training any new implementation is never fully rooted.

As part of the service package, laptops are maintained 3 times a year. During this maintenance period, technology center staff provide updates to software, general cleaning and physical inspection. In lieu of an accidental insurance program, we have purchased a 10% spares pool. When a teacher submits a work order for laptop repair, if the repair is estimated to take longer than 30 minutes, the teacher is issued a replacement laptop from our spares pool and returns to full computer functionality. Swapping out hardware isn't a concern, as programs and files are stored on our centralized servers and are part of a user's profile. Additionally, we are an HP Channel Services Network partner. Our technicians have obtained Desktop/Laptop certifications and can log directly into HP's website to order parts under warranty. We are reimbursed according to a repair cost schedule for any computer repaired that is under warranty.

We are usually in the lead as far as new emerging technologies are involved. We were among one of the first school districts to implement IP Telephony, and most recently a storage area network in a virtualized environment. This virtualization will allow us to evaluate new programs with a low to no cost. We will have the ability to "install new servers" without the hardware expense.

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

We have invested in an helpdesk/inventory work flow software called HelpStar. HelpStar audits a workstation on our network on a routine basis and builds a SQL database that can be queried. We have the ability to quickly gather information to answer the questions like, "How many Windows 98 workstations are on the network?" or "What workstations have 256meg RAM?". With this data available, we can plan and estimate upgrade costs to reach a certain minimum standard of our district's computer equipment.

Additionally, we are seeking a way to evaluate "how many times a program has been accessed" on a workstation so that we can appropriately leverage our software license costs and obtain other vital information. Beyond the cost factor, we can evaluate whether or not a piece of software is being used. This will provide us with information to consider - if a piece of software isn't being utilized as expected we can investigate whether it is an appropriate title or whether we need to provide additional professional development to our staff.

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

We have architected our support practices to make our jobs more efficient. For example, we have "ghosted" our workstations with the basic OS. We have (1) image for most of the district's computers that contains the operating system only. Applications are individualized packages that can be added or deleted upon request - or by a client side task. We are reaching into the realm where software can be installed or uninstalled through Windows Server 2003 - Group Policies. We decided long ago that man power is at a premium and we couldn't operate by sending a technician out to install a piece of software 200 times in a building. With a management foundation in place, we will be easily able to meet the capacity needed for the future. Additionally, we have added a email / web-based work order ticketing system. Users have the ability to submit a work order request and/or search through a knowledgebase to find a solution to their problem.

### **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	2 - Minimal	4 - Advanced
Data Analysis & Reporting	3 - Adequate	4 - Advanced
Grade Book	4 - Advanced	4 - Advanced
Library Automation	3 - Adequate	4 - Advanced
Facilities Management	3 - Adequate	4 - Advanced
Voice Telephony	4 - Advanced	4 - Advanced
Human Resources & Financial Management	4 - Advanced	4 - Advanced
Network Account Management	3 - Adequate	4 - Advanced
Transportation	3 - Adequate	4 - Advanced
Food Services	3 - Adequate	4 - Advanced

**How will we get there?**

We utilize DASL, a web-based and leveled access program, providing appropriate stake-holder access for our student information system.

This past year, we implemented Progress Book, a grade book package. The implementation has empowered many stake-holder groups. For instance, students and parents have instant access used to the teacher's gradebook to determine if they are on track. It has also allowed Administration to pull up a student's progress during a parent conference to determine reasons for success or failure. It provides access to support specialists, tutors and counselors who have a vested interest in their student's progress.

Our facilities management and technology management are web-based work order ticketing systems. Staff-members can enter work orders such as "I need a light bulb replaced" to "I need Inspiration installed". They have monitoring capability to see if their ticket has been assigned to a staff member and what the status is. Additionally, the facilities management package (publicschoolworks.com) houses an online training program. This online training ensures that every employee signs off on required updates such as "Slips, Trips and Falls" or "Blood-borne Pathogens". Additionally, this package is also a notification system. For example, I assigned the BETA survey to "all teachers". Teachers were notified via email that they were required to participate in the BETA survey - this system keep track of what teachers took the survey and what teachers still needed to. This was the first time the BETA survey was completed in a timely basis. It can also send out emails reminding users of yearly or monthly tasks.

Our Human Resources department utilizes an online application system through the local educational service center. Jobs are posted and applicants respond through this web-based system. We also keep a database of certification levels, professional development, license expiration dates, and review/observation data in a system called PDExpress.

Our financial reports are available through FiscWeb, a web-based reporting program. Administrators have the ability to check on budget allocations, remaining balances, or whether or not a check has been issued to a vendor.

Our food service utilizes a point of sale system that provides our food service director with information for state reports, and number of hot lunches sold. We have Lunch-Phone installed on top of this program that enables parents to call in and check account balances and/or submit credit card payments to their child's account.

Our transportation software, VersaTran RP provides our transportation department with routing information and costs associated.

Our network account management is automated through a visual-basic script utilizing an Excel spreadsheet.

We are interested in looking for a Data Warehouse system. One program is Performcen Trakker, which is modular in nature and includes Assessment Builder, Performance Trakker and Curriculum Mapping. Performance Trakker has the capability of combining multiple measures and showing multiple levels of

information, from the a district view, to a building view, to an individual view. It combines all of our student achievement data into one source and allows for end-users to drill down to answer the curious questions they have when reviewing data. Additionally, Inform puts together a list of common resources based upon the Ohio State Standards that teachers can pull from.

All of these systems support and lead towards increased student achievement.

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

Ultimately since all of these informational systems lead towards increased student achievement, we will value the effectiveness of this new/enhanced system implementation based upon our academic performance on standardized testing.

Other indicators, not as easily measured result in increased efficiency of office procedures. For instance, the automatation of export/import routines saves personnel time and error. Stake-holder access to data provides timely and effective results to the decision-making process. We have already experienced how our facilities management system streamlines routines such as compliance with annual employee trainings such as blood-borne pathogens. Additionally, many of our routine applications have been digitized and information is available on through a web-based program. This provides for point-in-time access to information at the point of need. Wait time has been taken out of the equation for decision-makers.

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

I would like to put our web-servers and information systems together to provide stake-holders access to all of the tools we have available via the intranet. We have many wonderful programs and resident experts available in our district. We need a system that allows for collaboration and sharing of this pool of talent and information. This will facilitate the alignment of our initiatives as a district.

**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	Sometimes	Always
Professional development planning for end users and support personnel	Sometimes	Always
Criteria for evaluation developed - including alignment to ACS and curriculum	Sometimes	Always
Evaluation of demo copies	Sometimes	Always
Implementation pilots	Sometimes	Always
Replacement cycle (upgrade, retire, new)	Sometimes	Always
System requirements / technical and operational support	Sometimes	Always

**How will we get there?**

After reviewing the State Software Selection Review Procedures, our first step should be developing a district software selection committee. We have laid a foundation by indicating we need to implement district standard software packages, but have a long way to go to meet the diverse needs of all our students. Many concerns / questions have arose regarding software selection from all stake-holder groups (administration, technicians, staff, students) that a software selection committee just might be the answer.

Additionally, we aim to align ALL of our software selections with the Ohio academic content standards. Then we want to provide teachers with a resource database that includes lesson plans, technology resources, software titles, and activities.

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

By developing a software selection committee, we will definitely be headed in the right direction if we focus on selecting software that supports instruction. We will aim to include considerations such as:

- 1) Alignment with content standards
- 2) Meeting individual student needs based on collected data
- 3) Providing assistive technologies for special needs students
- 4) Appealing to 21st century students
- 5) Promoting a wide-range of thinking skills
- 6) Addressing multiple learning styles
- 7) Age and ability appropriateness
- 8) Promoting safe and healthy use of technology resources

We will be able to measure our effectiveness during this process if the needs of students are being met and if progress in student achievement is made.

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

By implementing a software selection committee, we can select and determine the most appropriate software titles for increasing student achievement. By having a core set of software in the district, we can focus on professional development and lesson plan integration for maximum impact on student achievement.

## 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	4 - Advanced
Security zones	3 - Adequate	4 - Advanced
Wireless network security policies	4 - Advanced	4 - Advanced
Central log mechanism and review policy	2 - Minimal	3 - Adequate
Incident response procedures	3 - Adequate	3 - Adequate
Network security	3 - Adequate	4 - Advanced
Host Security	3 - Adequate	4 - Advanced
Data security / integrity	3 - Adequate	4 - Advanced
Anti-virus software	3 - Adequate	3 - Adequate
Spyware	3 - Adequate	3 - Adequate
Firewall	3 - Adequate	3 - Adequate
Filtering	3 - Adequate	4 - Advanced

#### How will we get there?

(NOTE: This narrative information is suppressed to protect sensitive information about the education organization.)

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

(NOTE: This narrative information is suppressed to protect sensitive information about the education organization.)

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

(NOTE: This narrative information is suppressed to protect sensitive information about the education organization.)

## 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	1:650	1:650
Support Staff to Teachers	1:50	1:50
Support Staff to Computers	1:250	1:250
Support Staff to Buildings	1:1.5	1:1

	Where are we now?	Where do we want to go?
Average Response Time (Days)	48 hours	24 hours
Service Level Agreement (SLA)	No	Yes
Full-time technology coordinator/director	Yes	Yes

### How will we get there?

As we build our management capability with automated procedures and remote access, we are better able to service our clients on a quick basis. I believe we need more instructional technology support. I would like to see the role of technology integration specialists added to an existing position at each building. We need to assist the teachers in the classroom when they work with technology until they have a comfort level. I also believe that as teachers receive professional development in technology, they are less likely to need technology support for the simple things. As we continue to build our knowledgebase, staff will have direct access to problem resolution.

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

The BETA survey is an excellent measure of technology utilization. If there are barriers to technology integration, utilization will not be evident. Utilization of computers, increasing network bandwidth and resources are all indicators of an alive technology program. We will continue to offer Technology professional development days. The Technology Advisory committee is in place to communicate the needs of users as well as communicate end-user satisfaction.

### How will we sustain focus and momentum?

Our technology service support program was founded with the principle that we can not continue to add people to meet the needs of our organization. We were challenged to work smarter and not harder. With this being a founding principle, we have developed procedures and implemented many resources and tools to effectively administer our environment of 1500 computers, laptops & IP phones. We feel that continuing in this direction will show continued improvement in our effectiveness.

## 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	More	More
Procurement Plan	Extensive	Extensive
Specifications/Requirements/Fits Analysis	Extensive	Extensive
Integration of donated time, materials or services	Some	More
Deployment/Installation plan	More	More
Initial Training and Professional Development	More	Extensive
Evaluation of current external support costs versus new purchase	Extensive	Extensive
Loss of institutional knowledge for replaced systems	Some	More
Phase Out/Replacement cycle	More	Extensive
Disposal costs	Some	Some

**How will we get there?**

One program we have put into place is becoming a HP Channel Services Network partner. Our technicians have become HP certified and we receive income for repairing our own equipment under warranty. In addition to an income generation, our technicians minimize time spent on the phone talking to HP service techs troubleshooting problems. We can now login directly to HP Parts & Service and add a request that certain parts be shipped to us.

Another procedure we have in place is extending the usable life of our equipment. Our budget will not allow us to replace equipment on regular basis. We look at upgrading costs as well as refurbished computers as a life-cycle component. As we take out of warranty computers off of the network, we have kept parts such as RAM, hard drives, motherboards, power supplies, etc. for use in keeping our other like machines up and running longer.

We dispose of our equipment in an annual recycling event in our local community. Time and donation are the costs associated with this event.

When purchasing new equipment, we typically take our time to find the right fit between vendor relationships, fit analysis and price. Cheapest isn't always the best. However, we do consider price, but take into consideration the value-added by the vendor.

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

Twice we have re-evaluated the burden of technology purchases to our organization. The first addition was the IP 250-phone deployment. The second addition was adding a wireless infrastructure and 300 teacher laptops. The technology department continues to support the foundation of the district's operations and it adjusts accordingly.

We are seeking new programs that supports our operations. For example, in the summer we utilize students as technician assistants to assist with the maintenance, imaging and deployment of computers. Outstanding work-orders are usually the sign that we aren't running as efficiently as we should be and that data is taken into consideration for changing procedures, re-evaluating current procedures, or seeking temporary support.

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

We will continue our incorporation of TCO as a critical measurement for our technology infrastructure by keeping and enhancing our policies and computer management programs. As our infrastructure grows, our capacity must scale to meet the need. I feel that our current programs and management techniques allow for our department to meet the district's growth.

## Budget and Planning

### 5.0 Budget

Sound budgeting is important for your technology plan; not only to project future spending and funding, but also to meet requirements for various private, state and federal funding opportunities. It is recommended that a representative from your treasurer's office be involved in completing this phase.

(NOTE: This budget information is suppressed to protect sensitive information about the education organization.)

	Where are we now?	Where do we want to go?			
	Current Fiscal Year	2009-10	2010-11	2011-12	Total
Network/Telecommunications Services	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Hardware	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Student Data Administrative Systems	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Software	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Security	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Technology Staffing/Support	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Professional Development	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Consumables	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
Additional	xx,xxx	xx,xxx	xx,xxx	xx,xxx	xx,xxx
<b>Total</b>	<b>xx,xxx</b>	<b>xx,xxx</b>	<b>xx,xxx</b>	<b>xx,xxx</b>	

*Provide details about your budget process. How did your committee gather this data? Have you included spending amounts for planned future technology hardware, software, professional development, or other services?*

The above stated technology budget encompasses many revenue sources. The Technology program at Winton Woods is funded through the erate discount program, grants and subsidies, federal, state and local dollars.

In 1998, the district passed a levy, allocating a portion of the revenue for capital improvements. The technology program shares revenue from the capital improvements allocation. Prior to this timeframe, the district had minimal equipment and no network. The district took out a loan to establish a network, connectivity and student computers. The loan payments are paid for by the capital improvements budget. FY2009-10, this 10 year loan has been paid for, thus allowing for an increased capital improvements budget for future years. Sadly enough, our district has experienced a flat to declining budget from the state and we have had to temporarily stop capital improvements in the general fund, thus relying more on the permanent improvement fund to supplement.

The district always looks at ways to reduce expenditures. Including, looking at off-lease refurbished equipment to cut costs while keeping a district minimum standard.

#### How will we get there?

Technology expenses will continue to be funded through the erate discount program, grants and subsidies, federal, state and local dollars.

In the future to cut costs, we are looking at ways to utilize power at the server and repurpose our older equipment as terminal emulators. We are investigating VMWare for virtualized workstations. In addition to extending the life cycle of a computer, the total cost of ownership will be less utilizing a server-client based solution. We will be easily able to remotely manage our infrastructure and pool our resources.

## Appendix A - Additional Documents

Description	Name	Date Submitted
Winton Woods City Schools Technology Profile	Tech Profile 2009.pdf	May 04, 2006