

Educational Technology Plan for Tri-Valley Local SD - 048876

School Years:

2006-07

2007-08

2008-09

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**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 v3 Planning Framework
- 1.2 Review Current Technology Plan
- 1.3 Vision/Mission

Curriculum Alignment & Instructional Integration

- 2.1 Curriculum Alignment to Ohio Technology Academic Content Standards (ACS)
- 2.2 English Language Arts Academic Content Standards
- 2.3 Fine Arts Academic Content Standards
- 2.4 Foreign Language Academic Content Standards
- 2.5 Mathematics Academic Content Standards
- 2.6 Science Academic Content Standards
- 2.7 Social Studies Academic Content Standards
- 2.8 Technology Academic Content Standards

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

Pre-Planning

1.0 Establish Technology Planning Committee

Library/Media Specialist
Principal
Superintendent
Teacher
Technology Coordinator
Technology Support
Treasurer

Approvers:

Douglas Spade (Superintendent)
Mark Goodall (Technology Coordinator/Director)
Max Maley (Treasurer)

1.1 Overview of TPT v3 Planning Framework

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

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

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

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

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

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

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

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

1.2 Review Current Technology Plan

"Was the plan realistic then?"

Strategy 1 - "Each teacher will use information from data warehousing to improve student performance."

Tools like DASL were available to compile and analyze data. LACA does give us resources like Progress Book to help teachers and parents stay more quickly informed. The state has made more specific data available to us to analyze our students' strengths and weaknesses.

Strategy 2 - "Explore software that can impact student achievement in math."

It was realistic given that computer upgrades were another part of the plan. Classroom software in addition to Successmaker (district software) promoted mastery of state indicators. Budget allocations from technology and district monies made this goal realistic. Otherwise, it might not have been accomplished.

Strategy 3 - "Implement a balanced literacy program."

It was believable at that time that software would impact a balanced literacy program and foster student achievement. Using software in a center approach would give teachers more tools to enhance reading skills.

Strategy 4 - "Incorporate a variety of learning strategies and techniques into classroom instruction."

It was realistic because their were specific tools in mind such as digital projectors, and net-op classroom

management software to update the methods of every day instruction.

Strategy 5 - "Integrate technology into the administrative duties of teachers and staff."
There were several tools on the market that provided the technology to make this happen.

Strategy 6 - "Students will incorporate the use of primary sources in research using the Internet."
Yes, because our network infra-structure was in place and we had access to these resources over the internet.

Strategy 7 - "To improve curriculum instruction through staff technology development."
Although it took significant time to put all the pieces in place, it was a clear expectation that curriculum could be impacted by professional development.

Strategy 8 - "Utilize IVDL technologies."
The high school has realized benefits from the units in that building. The high cost of the equipment made it unrealistic to expect that this technology would be widespread.

While each of these strategies was realistic, the support factor was overwhelming in implementing and supporting these strategies in a three year period.

"Is the plan realistic now?"

Looking back most of those strategies were realistic for 2003. In 2006, those strategies are already integrated to a point. More needs to be done to fine tune, train, and support staff to fully integrate into the classroom and impact student achievement. The plan is realistic now given that most of the strategies have been accomplished. More needs to be done to optimize effectiveness.

1.3 Vision/Mission

A. Vision

The vision that Tri-Valley Schools has for the classroom of the future would include:

- The infusion of technology into all areas of the curriculum so that technology is learned through integration, not as a separate subject.
- The efficient use of technology to enhance the academic achievement and cultural experiences of all students equally.
- The implementation of additional technology for student learning to provide assessment, review, remediation and presentation of learned skills.
- The use of data management tools to assist teachers in developing instruction which meets the individualized needs of their students.
- The preparation of students for employment and daily life skills in a technology driven world that requires critical thinking, social responsibility and lifelong learning.

B. Mission

The mission for technology in the Tri-Valley School District is to enhance and motivate student learning, coordinate and assist with teaching functions and data management, and provide each student with the critical thinking skills and experiences that will prepare them for success in a technology driven world.

Curriculum Alignment & Instructional Integration

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

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

| | Where are we now? | Where do we want to go? |
|------------------------------|-------------------|-------------------------|
| English Language Arts | In Progress | 2007-08 |
| Fine Arts | In Progress | 2007-08 |
| Foreign Language | In Progress | 2008-09 |
| Mathematics | In Progress | 2006-07 |
| Science | In Progress | 2008-09 |
| Social Studies | In Progress | 2006-07 |
| Technology (specific course) | In Progress | 2008-09 |
| Other Content Areas | In Progress | 2008-09 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how those standards can be integrated into other content areas.
3. Break down by grade level and content area and provide several suggestions for integration.
4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for other content areas.
6. Use departmental professional development to explore ways of integrating technology into individual content areas.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Choose the worst performing indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
9. We need to help the staff see technology integration as a process, and not expect them to "convert" immediately.
10. Build a repository of shared lesson plans that are technology integrated.
11. Explore the possibility of offering a stipend to teachers in each building for assisting with technology.
12. Funding is an issue. Check with the Endowment Fund about sponsoring a technology "retreat" during which staff could create the custom lesson plans*. These plans could be shared at grade level meeting in which targeted staff members will be in attendance.
13. Promote the technology resources available through the Internet. (online learning activities, lesson plans, interactive encyclopedias, reference databases, Ohio specific database, links to educational websites).
14. Send targeted staff members to "train-the-trainer" workshops sponsored by educational technology integration vendors.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.
3. Develop a checklist for technology benchmarks appropriate for each grade level so that teachers can determine student proficiency.

How will we sustain focus and momentum?

1. Staff in-service needs to be regularly planned and appropriately aligned.
2. Training needs to be exciting and proven to be relevant.
3. Building representatives for technology could promote and assist with technology integration.
4. Administrators need to encourage and EXPECT technology integration from their staff.
5. Promote a "work smarter, not harder" mentality, and demonstrate how using that approach will make their jobs more efficient and less time consuming.
6. Use ongoing departmental professional development to explore ways of integrating technology into individual content areas.
7. Sponsor ongoing workshops where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. For each school year, choose the worst performing indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
9. Maintain an updated repository of shared lesson plans that are technology integrated.
10. Staff members who attended "train-the-trainer" workshops sponsored by educational technology integration vendors will provide workshops at the building level.
11. Establish scheduled intervals where the district technology committee evaluates district technology integration progress against the technology plan.

2.2 English Language Arts Academic Content Standards**Instructional Integration**

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-2 | 2.5 | 4.0 |
| 3-4 | 2.5 | 4.0 |
| 5-7 | 2.5 | 4.0 |
| 8-10 | 2.5 | 4.0 |
| 11-12 | 2.5 | 4.0 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how technology and other content standards can be integrated into English content areas.
3. Break down by grade level and provide several suggestions for integration.
4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for English.
6. Use departmental professional development to explore ways of integrating technology and other content into English.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Choose the worst performing English indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
9. Build a repository of shared English lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Departmental in-service needs to be regularly planned and appropriately aligned.
2. Use ongoing departmental professional development to explore ways of integrating technology into English content areas.
3. Sponsor ongoing workshops where teachers bring an English lesson plan, and see how that lesson plan could be enhanced with technology.
4. For each school year, choose the worst performing English indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
5. Maintain an updated repository of shared English lesson plans that are technology integrated.

2.3 Fine Arts Academic Content Standards

Instructional Integration

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-4 | 1.0 | 3.0 |
| 5-8 | 1.5 | 3.0 |
| 9-12 | 1.5 | 3.0 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how technology and other content standards can be integrated into Fine Arts content areas.
3. Break down by grade level and provide several suggestions for integration.
4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for Fine Arts.
6. Use departmental professional development to explore ways of integrating technology and other content into Fine Arts.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Build a repository of shared Fine Arts lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Departmental in-service needs to be regularly planned and appropriately aligned.
2. Use ongoing departmental professional development to explore ways of integrating technology into Fine Arts content areas.
3. Sponsor ongoing workshops where teachers bring a Fine Arts lesson plan, and see how that lesson plan could be enhanced with technology.
4. Maintain an updated repository of shared Fine Arts lesson plans that are technology integrated.

2.4 Foreign Language Academic Content Standards

Instructional Integration

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-4 | N/A | N/A |
| 5-8 | N/A | N/A |
| 9-12 | 1.5 | 3.0 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how technology and other content standards can be integrated into Foreign Language content areas.
3. Break down by grade level and provide several suggestions for integration.

4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for Foreign Language.
6. Use departmental professional development to explore ways of integrating technology and other content into Foreign Language.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Build a repository of shared Foreign Language lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Departmental in-service needs to be regularly planned and appropriately aligned.
2. Use ongoing departmental professional development to explore ways of integrating technology into Foreign Language content areas.
3. Sponsor ongoing workshops where teachers bring an Foreign Language lesson plan, and see how that lesson plan could be enhanced with technology.
4. Maintain an updated repository of shared Foreign Language lesson plans that are technology integrated.

2.5 Mathematics Academic Content Standards

Instructional Integration

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-2 | 2.0 | 3.0 |
| 3-4 | 2.0 | 3.0 |
| 5-7 | 2.0 | 3.0 |
| 8-10 | 2.5 | 3.5 |
| 11-12 | 2.5 | 3.5 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how technology and other content standards can be integrated into Math content areas.
3. Break down by grade level and provide several suggestions for integration.
4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for

Math.

6. Use departmental professional development to explore ways of integrating technology and other content into Math.

7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.

8. Choose the worst performing Math indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.

9. Build a repository of shared Math lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.

2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Departmental in-service needs to be regularly planned and appropriately aligned.

2. Use ongoing departmental professional development to explore ways of integrating technology into Math content areas.

3. Sponsor ongoing workshops where teachers bring an Math lesson plan, and see how that lesson plan could be enhanced with technology.

4. For each school year, choose the worst performing Math indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.

5. Maintain an updated repository of shared Math lesson plans that are technology integrated.

2.6 Science Academic Content Standards

Instructional Integration

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

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

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

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

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-2 | 1.0 | 3.0 |
| 3-5 | 1.5 | 3.0 |
| 6-8 | 2.0 | 3.0 |
| 9-10 | 2.0 | 3.0 |
| 11-12 | 2.0 | 3.0 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.

2. Show how technology and other content standards can be integrated into Science content areas.

3. Break down by grade level and provide several suggestions for integration.

4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.

5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for Science.
6. Use departmental professional development to explore ways of integrating technology and other content into Science.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Choose the worst performing Science indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
9. Build a repository of shared Science lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Departmental in-service needs to be regularly planned and appropriately aligned.
2. Use ongoing departmental professional development to explore ways of integrating technology into Science content areas.
3. Sponsor ongoing workshops where teachers bring an Science lesson plan, and see how that lesson plan could be enhanced with technology.
4. For each school year, choose the worst performing Science indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
5. Maintain an updated repository of shared Science lesson plans that are technology integrated.

2.7 Social Studies Academic Content Standards

Instructional Integration

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-2 | 1.0 | 3.0 |
| 3-5 | 1.5 | 3.0 |
| 6-8 | 1.5 | 3.0 |
| 9-10 | 1.5 | 3.0 |
| 11-12 | 1.5 | 3.0 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how technology and other content standards can be integrated into Social Studies content areas.

3. Break down by grade level and provide several suggestions for integration.
4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans for Social Studies.
6. Use departmental professional development to explore ways of integrating technology and other content into Social Studies.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Choose the worst performing Social Studies indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
9. Build a repository of shared Social Studies lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Departmental in-service needs to be regularly planned and appropriately aligned.
2. Use ongoing departmental professional development to explore ways of integrating technology into Social Studies content areas.
3. Sponsor ongoing workshops where teachers bring an Social Studies lesson plan, and see how that lesson plan could be enhanced with technology.
4. For each school year, choose the worst performing Social Studies indicator at each grade level based on achievement scores, and provide each teacher with a custom created technology enhanced lesson as an example.
5. Maintain an updated repository of shared Social Studies lesson plans that are technology integrated.

2.8 Technology Academic Content Standards

Instructional Integration

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

| | Where are we now? | Where do we want to go? |
|-------|-------------------|-------------------------|
| Pre-K | N/A | N/A |
| K-2 | N/A | 1.0 |
| 3-5 | N/A | 1.0 |
| 6-8 | 3.0 | 4.5 |
| 9-10 | 3.0 | 4.0 |
| 11-12 | 3.0 | 4.0 |

How will we get there?

1. Provide teachers with a copy of the technology standards SPECIFICALLY for their grade level.
2. Show how technology and other content standards can be integrated into all other content areas.
3. Break down by grade level and provide several suggestions for integration.
4. Look for ways to use aides and other personnel resources to assist in integrating technology into classrooms.
5. Use Progressbook's standards alignment features to list the technology standards included in lesson plans.
6. Use departmental professional development to explore ways of integrating technology and other content.
7. Sponsor a workshop where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
8. Build a repository of shared lesson plans that are technology integrated.

How will we know we're getting there?

1. Check ProgressBook or written lesson plans to see if technology standards are being included.
2. Administrators need to include technology integration into the staff evaluation process.

How will we sustain focus and momentum?

1. Staff in-service needs to be regularly planned and appropriately aligned.
2. Training needs to be exciting and proven to be relevant.
3. Building representatives for technology could promote and assist with technology integration.
4. Administrators need to encourage and EXPECT technology integration from their staff.
5. Promote a "work smarter, not harder" mentality, and demonstrate how using that approach will make their jobs more efficient and less time consuming.
6. Sponsor ongoing workshops where teachers bring a lesson plan, and see how that lesson plan could be enhanced with technology.
7. Maintain an updated repository of shared lesson plans that are technology integrated.
8. Send targeted staff members to "train-the-trainer" workshops sponsored by educational technology integration vendors.
9. Establish scheduled intervals where the district technology committee evaluates district technology integration progress against the technology plan.

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

How do we get there?

Align funding with specific goals and strategies to ensure that all spending furthers specific initiatives.

Continue through the established 6-year replacement life cycle for computer workstations.

Provide continuing education and exposure to new technologies for technology support staff members to ensure that all available innovations are considered.

Use academic content standards and achievement/proficiency results to determine what technology initiatives and equipment should be established and/or expanded.

Use the technology committee (made up of staff from all buildings and grade levels) to generate ideas, solutions, and programs.

How do we know we are getting there?

Determine if requested technology initiatives were funded appropriately and adequately.

Conduct computer inventory audits to determine that the 6-year cycle is being adhered to, and that stations meet acceptable minimum standards.

Review achievement/proficiency results to determine the effectiveness of technology's impact.

Survey the technology committee or entire staff to determine the level of success with which technology supports their every day instruction of academic content standards.

How do we sustain the focus and momentum?

Use the technology committee members to maintain an active dialog with their colleagues.

Facilitate ongoing professional development for all supported technology initiatives.

Establish milestone-based reviews of technology initiatives in the areas of financial responsibility and academic content standard relevance.

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) | Awareness | Exploration |
| C. Advocacy for technology | Awareness | Exploration |
| D. Measures and accountability for effective use | Awareness | Adoption |
| E. Role model in the use of technology | Awareness | Exploration |
| F. Professional development | Adoption | Exploration |
| G. Support for educational technology | Adoption | Exploration |
| H. Professional practice | Adoption | Exploration |

How do we get there?

Provide in-house, hands-on professional development to leadership at a level that matches or exceeds what staff receives.

Establish a check list of technology expectations for leadership self-evaluation.

Require leadership to facilitate technology discussions as part of staff meetings and other opportunities.

Remind leadership that they are the role model, and that they have to display the characteristics of technology competency that they expect from their staff.

How do we know we are getting there?

Monitor the leadership's usage of technology in their operations. Look for online lesson plans, electronic attendance, email communications, etc. as examples of leadership advocacy.

Survey staff members about their own personal use of technology as an indicator of leadership's effectiveness in promoting its use. Possibly use the BETA information to compare building results.

How do we sustain the focus and momentum?

Provide ongoing in-house, hands-on professional development for leadership.

Find ways to make every day processes easier with technology as an encouragement to change operational processes.

Have technology committee members encourage and support their building leaders in the area of technology.

Establish specific limited technology goals at a district level that are obtainable and able to be evaluated and measured.

3.3 Technology Leader/Coordinator Time Commitments

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

Other (please describe):

Travel between distant buildings.

Construction overhead for meetings, engineering.

Establishing and maintaining vendor and service provider relationships.

Email, newsletter and other communications.

How will we get there?

Explore using secretarial services for purchase orders and other "paperwork" items.

Move technology implementation responsibilities to network engineer.

Work more closely with Curriculum Director and teaching staff on technology integration plans.

Establish more extensive professional development opportunities in areas identified by staff.

How will we know we are getting there?

An increase in the percentage of purchase orders and paperwork facilitated by administrative assistants.

Determine number of technology integration sessions offered or coordinated by the technology coordinator.

Review lesson plans to determine the impact of the technology integration sessions.

Determine number of professional development sessions offered or coordinated by the technology coordinator.

Use the district technology committee, made up of representatives from each building, to gauge the effectiveness of these programs.

How will we sustain focus and momentum?

Use the district technology committee, made up of representatives from each building, to gather issues, communicate and encourage building staff.

Use the technology board committee to hold the technology coordinator accountable for execution of established goals.

Adjust responsibilities and priorities of other technology support staff members to accommodate the suggested changes at the technology coordinator level.

Technology Infrastructure, Management and Support

4.1 Networking, Internet & Telecommunications

"Where are we now?"

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

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

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

"Where do we want to go?"

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

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

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

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

| | Where are we now? | Where do we want to go? |
|--|-------------------|-------------------------|
| Thin/Network Clients | None | Researching |
| File and Print Sharing | Many | Increase |
| Internet Traffic | Many | Increase |
| Video Conferencing (IP) | Some | Increase |
| Video Conferencing (ATM) | Some | Decrease |
| Video On-Demand (local building/district server) | Some | Researching |
| Video Streaming (Internet) | Some | Increase |
| Voice Communications - Voice over IP | Some | Increase |
| Voice Communications - Centrex/PBX | Some | Decrease |
| Remote Access (Dial-up/VPN) to School Resources | Some | Researching |
| Wireless | Some | Increase |
| Email | Many | Increase |
| Enterprise/Shared Applications (e.g., online grade book) | Many | Increase |

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

How will we get there?

We will need to increase our WAN bandwidth to support VOIP deployments and enterprise applications.

We will also need to increase our Internet bandwidth to meet increasing demand.

We are working to replace ATM-based video conferencing equipment with IP-based equipment.

We are researching the use of thin clients to reduce station cost and increase the level of manageability.

We are working to network all printers to provide shared access to those resources.

We are increasing the LAN and WAN bandwidth and infrastructure to support an integrated data/voice/video network.

How will we know we are getting there?

We must have enough bandwidth to maintain VOIP call connections, and to provide adequate response to network application requests without dropping sustained connections.

We will use the technology newsletter to inform staff of the status of the infrastructure and any planned improvements.

We will use network monitoring systems with outage notification and uptime reporting capabilities to ensure quality of service.

How will we sustain focus and momentum?

We will implement network monitoring of bandwidth, stability, and usage, and respond with additional capacity as needed.

We will use the technology committee to gauge the staff's perceived satisfaction with infrastructure performance.

4.2 Access to Technology

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

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

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

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

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

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

| | Where are we now? | Where do we want to go? |
|--|--------------------------|--------------------------------|
| Teacher to Computer Ratio (1:n) | 1:1 | 1:1 |
| Student to Computer Ratio (1:n) | 1:6 | 1:5 |
| Peripherals (e.g. scanner, digital camera) | Pervasive | Pervasive |
| Emerging Technologies | Middle adopter | Middle adopter |
| Assistive and adaptive hardware (e.g. Intellikeys, Alpha Smart) and specialized software | Some | Pervasive |

How will we get there?

Our district will be constructing 4 new elementary schools and renovating our high school during the 3-year period covered by this plan. The new facilities will make the distribution of technology much easier by providing defined spaces and adequate connections for computers and peripherals. Computer labs are more well defined and supported in the new configurations as well.

Wireless networking should be installed as part of the construction process, making technology more mobile and wide-spread.

The Special Education Director and Technology Director will work together to identify and obtain technology targeted to assist students with special needs.

How will we know we are getting there?

Ensure that the technology being installed in the new buildings complies with the OSFC and ETech specifications.

Use a network systems testing lab to evaluate system performance and compatibility between selected hardware and software.

How will we sustain focus and momentum?

Throughout the construction process, we will have regularly scheduled progress meetings with the technology engineers.

Use the building technology committee representatives to identify areas of need, and ensure that provided solutions are being effectively used.

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

How will we get there?

Our A-Site, LACA, will be implementing a new web-based student management system called DASL beginning with the 2006-2007 school year. That system will integrate many aspects of student data, and make it easily accessible to staff via a web browser.

District-wide student software such as Pearson's Successmaker will be made available on-line for home access etc. Both students and parents will have access to that software.

We will receive new facilities management software as part of new building construction. That software will be integrated with existing processes and systems.

A district-wide IP telephony installation will also be accomplished during construction.

The transportation department will upgrade the EduLog software to manage their processes.

Food services will expand their use of the CafeTerminal software to make feedback to parents about account status more efficient.

How will we know we are getting there?

Count web site visits from parents to determine effectiveness of parent communication.

Determine the increase in the amount of hours that students spend on instructional software from outside the district.

Survey parents to assess their level of usage, and determine their satisfaction with the amount of information provided.

Determine the amount of work hours gained through efficiencies provided by facilities management and transportation systems automation.

How will we sustain the focus and momentum?

Provide information access training sessions to parents or other community members.

Use the technology committee and parent organizations to report needs for expanded information access.

Establish a parent communication network using email as a transport.

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) | Rarely | Always |
| System requirements / technical and operational support | Sometimes | Always |

How will we get there?

The technology committee has a sub-committee that is focused on software evaluation and selection. That committee will work to further refine that process to ensure that all components of the selection process are validated.

The technology committee will work with the policy committee to ensure that the selection process is required for any and all software purchases.

At any point where the hardware or operating system is upgraded or replaced, all software to be used on the affected computers will be put through a re-certification process before being re-installed.

How will we know we are getting there?

Use the technology committee to determine if appropriate software (student management, classroom practice, productivity tools) has been selected and installed for classroom use.

Work with the Curriculum Director to ensure that all software remains aligned with academic content standards.

Use online software inventory tools like EZ-Audit to determine what software is in use, and where.

How will we sustain focus and momentum?

We will strive to make use of pooled network or group licensing, where available, to achieve benefits in purchase cost and software management.

Monitor the usage of software to determine if continuing to upgrade and support that product will provide adequate benefit.

The software sub-committee will work within their buildings to survey local effectiveness and determine additional needs.

Ongoing hands-on professional development will be provided in-house for software that is being heavily utilized.

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 | 2 - Minimal | 3 - Adequate |
| Central log mechanism and review policy | 1- None | 3 - Adequate |
| Incident response procedures | 2 - Minimal | 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 | 4 - Advanced |
| Spyware | 2 - Minimal | 3 - Adequate |
| Firewall | 3 - Adequate | 4 - Advanced |
| Filtering | 3 - Adequate | 4 - Advanced |

How will we get there?

To improve our focus on data security and user management we will look on how to leverage and extend our Active Directory infrastructure. Methods we may consider to enhance user authentication may include biometric (fingerprint), complex passwords with advanced criteria, one time password (i.e. secure key), etc.

To enhance and secure both our wired and wireless infrastructure, we plan to examine methods of device authentication through WPA, Radius, MAC authentication, central authentication using a product such as Blue Socket, etc.

To provide enhanced security, access control, and logging of Internet and inter-site communications we are considering introducing a network access control product such as Microsoft Internet Security and Acceleration server.

How will we know we are getting there?

We will know we are meeting our goals by improved incident detection and management and either a lack of or less significant security issues.

How will we sustain the focus and momentum?

We will work with the district's policy committee to establish written policies and procedures for security management. This ensures that all policies are board approved and published with all other policies.

Professional development sessions at back to school or other critical times will also enhance awareness.

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 | 1:1000 | 1:425 |
| Support Staff to Teachers | 1:115 | 1:50 |
| Support Staff to Computers | 1:383 | 1:160 |
| Support Staff to Buildings | 1:2.666 | 1:1 |

| | Where are we now? | Where do we want to go? |
|---|-------------------|-------------------------|
| Average Response Time (Days) | 4 | 2 |
| Service Level Agreement (SLA) | No | Yes |
| Full-time technology coordinator/director | Yes | Yes |

How will we get there?

To obtain the desired levels of support, the technology staff would ideally consist of the following positions:

Technology Director - Strategic planning
Network Engineer - Network/Server management

Lead Technician - Workstation support coordinator
 HS/MS Shared Technician - Support for HS/MS buildings
 Elementary Shared Technician - Support for 4 elementary buildings
 Local building 1st responder - building staff paid part-time as a first level support contact
 Curriculum Integration Specialist - Tech staff member with classroom experience that will assist teachers in integrating technology into their lesson plans

How will we know we are getting there?

Use helpdesk software to determine whether average response time is decreasing.

Use BETA survey data to determine staff satisfaction with technology support.

Use building technology committee representatives and 1st responders to report any support barriers.

Review support ratios as additional staff/support are added to determine that ratios are decreasing according to this plan.

Use an online support survey to determine staff satisfaction with support solutions.

How will we sustain focus and momentum?

Review support survey statistics at technology committee meetings and discuss ways to improve those results.

Review helpdesk request aging statistics and ensure that requests are addressed in a timely fashion.

Review helpdesk requests to determine trends in problem type and frequency, and address common issues with alternative solutions.

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 | Some | More |
| Specifications/Requirements/Fits Analysis | Extensive | Extensive |
| Integration of donated time, materials or services | None | Some |
| Deployment/Installation plan | More | More |
| Initial Training and Professional Development | Some | Extensive |
| Evaluation of current external support costs versus new purchase | Some | Some |
| Loss of institutional knowledge for replaced systems | Some | Some |
| Phase Out/Replacement cycle | More | More |
| Disposal costs | Some | More |

How will we get there?

We will use this Technology Plan and our 6-year life cycle replacement plan to guide future purchasing decisions.

We will use E-Rate monies to fund the purchase of computer systems according to the 6-year replacement cycle.

We will investigate the use of student resources, military disposal services, building volunteer programs and other creative technology sources to reduce costs.

As technology requirements in the classroom increase, we must increase the amount of training involved in those

deployments. Considering the amount of training required for any new purchases to be used effectively should increase our return on technology investments. We will work with the district professional development committee and the technology training sub-committee to established increased levels of technology professional development.

With increasing consideration for our environment, we must increase our consideration for PROPER disposal processes and the costs associated with them. We will consider the materials used in the component construction of the devices, and their effects on our already over-polluted world.

How will we know we are getting there?

We should see a decrease in the disposal costs for equipment by considering disposal factors at the time of purchase.

We should see a decrease in the time and costs associated with computer deployment by utilizing donated resources.

We should see a more effective use and a decreased learning period for new technologies as we improve our training.

By following our technology plan and replacement plan more closely, we should see our technology fall in line with our proposed technology improvement goals more quickly and effectively.

How will we sustain focus and momentum?

The technology committee will review all major technology purchases to ensure that all factors of TCO are considered.

The district's professional development teams will continually review the effectiveness of technology training in association with other educational offerings.

We will establish ongoing communications with building volunteer coordinators to identify new opportunities.

Budget and Planning

5.0 Budget

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

| | Where are we now? | Where do we want to go? | | | |
|--|---------------------|-------------------------|----------------|----------------|---------|
| | Current Fiscal Year | 2006-2007 | 2007-2008 | 2008-2009 | Total |
| Network/Telecommunications | 11,000 | 30,000 | 30,000 | 15,000 | 75,000 |
| Access to Technology | 87,500 | 232,500 | 250,000 | 200,000 | 682,500 |
| Shareholder Access to Educational Informational Applications | 0 | 5,000 | 10,000 | 15,000 | 30,000 |
| Educational Software | 40,000 | 15,000 | 15,000 | 15,000 | 45,000 |
| Security | 10,000 | 10,000 | 10,000 | 10,000 | 30,000 |
| Technology Staffing/Support | 175,000 | 225,000 | 275,000 | 375,000 | 875,000 |
| Professional Development | 10,000 | 10,000 | 10,000 | 10,000 | 30,000 |
| Consumables | 6,000 | 7,500 | 7,500 | 7,000 | 22,000 |
| Additional | 20,000 | 20,000 | 22,000 | 22,000 | 64,000 |
| Total | 359,500 | 555,000 | 629,500 | 669,000 | |

Additional Items

Printers and associated maintenance/repair.

General/Miscellaneous purchases outside designated categories.

Budget process details

Because we are moving into new buildings in the 2007-2008 time frame, our costs in the 2006-2007 and 2007-2008 school years will increase. Those increases will cover the costs of installing new equipment into new buildings.

Increases in technology staffing/support each year are related to the 4 additional support positions outlined in the support section of this plan. One position is added in each of the first two years, and two positions in the final year.

Due to the investments in educational software over the past 3 years, the amount spent in the upcoming years will decrease as we only purchase updates to sustain existing programs.

Some categories have also been increased over time to reflect inflation, and our district's increased commitment to technology.

How will we get there?

Re-allocate current staff to support increasing needs for technology implementation and support.

We will ensure that we are receiving the full benefit of existing, known funding sources like ETech, E-Rate, and other federal and state initiatives.

We will investigate internships and other cooperative educational opportunities with area colleges and tech centers as a possible source for low-cost computer technicians.

Our district piloted a grant writing position this year, but lost that position when that staff member quit. We would like to consider replacing that resource to generate income streams from grant opportunities.

We will investigate the further use of free government surplus outlets as sources for additional hardware.