

## **District/Union 61 Technology Plan 2010-2013**

District/Union Information: Tantasqua Regional School District, Brimfield, Brookfield, Holland, Sturbridge, Wales

Superintendent of Schools: Daniel Durgin

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LEA Code 770

### **Technology Mission Statement**

The technology mission of Tantasqua Regional School District and School Union #61 is to provide equitable access for all students and staff to technological resources. These resources promote critical thinking, problem solving and communication skills required for students to become lifelong learners and productive citizens in a technologically complex, multicultural and global environment.

### **Technology Vision Statement**

Our purpose is to provide our students and staff with the tools and knowledge base to succeed in an ever-changing world. It is our objective to continue implementing the Massachusetts Recommended PreK-12 Instructional Technology Standards in order to provide these necessary skills to our student population. Ongoing technology professional development serves as a vehicle to enable teachers to enhance their classroom environments.

Technology is a vital source of information and communication linking school, home, community and the world. It provides us with the impetus and the means to enrich our schools in the following ways:

- Access local and global information
- Provide effective and efficient communication
- Streamline administrative tasks
- Actively engage students in learning, both individually and in groups
- Enable access to the curriculum
- Collect and analyze data
- Manage assessment data
- Enables individualized instruction
- Offers opportunities for differentiated instruction
- Facilitates assistive technology and universal design for learning (UDL).

Technology enables teachers to modify their classroom environments to meet the challenges of today's world and has become an essential tool for teaching and learning.

### **Current Status**

This section provides information on the status of the school district as of school year 2009/2010. Three methods of data collection were used based on the Massachusetts DOE Teacher Self Assessment Tool (TSAT), Teacher Technology Use Survey and a survey of students to determine grade 5-8 technology mastery levels. Results are as follows:

Number of Teachers in School Technology Self Assessment Tool (TSAT)

- Early Technology – 40%
- Developing Technology – 25%
- Proficient – 25%
- Advanced – 10%

Teacher Technology Use Survey Use of Technology for Professional Activities:

- Daily – 100%
- Once a Week – 0
- Once a Month – 0
- Never/Rarely – 0
- Use of Technology with Students:
- Daily – 30%

- Once a Week – 40%
- Once a Month – 20%
- Never/Rarely – 10%

Student Mastery Levels:

- Grade 8 – 90%
- Grade 12 – 90%

**Tantasqua/Union 61 Shared Goals**

- Explore the feasibility of a fiber optic back bone between all schools
- Increase bandwidth at the sites that utilize cable modems
- Install redundant internet connection.
- Deploy the use of online learning environment and course management system
- Implement web based special education software
- Move to a web based student information system (SIS) that is compatible with special education software and telephone notification software.
- Centralize Anti-Virus management for the district
- Update acceptable use policy
- Deploy more virtual servers
- Expand and improve the district-wide web site, including teacher pages, school committee information, building use information and other information useful to the member communities. This will be done via a content management system allowing approved personnel to make their own updates.
- Ensure all schools maintain a standard software image
- Implement computer-based assessment tools for math and reading
- Provide increased and ongoing professional development for administrative staff responsible for DOE reporting
- Provide increased and ongoing technology professional development for teaching staff
- Coordinate licensing for commonly used software
- Continue to improve the centralized accounting and human resources system for increased efficiency and cost-effective operation. This will be accomplished by implementing district wide access through Microsoft Terminal Services.

**Materials and Services to be procured through the ERATE Program**

- For FY11 the school organization will continue with the network infrastructure put into place in FY10. This included the implementation of a cable-based wide area network (WAN) with a single access point to the ISP. This network configuration provides a single monitoring and content filtering point, which is cost effective
- Continue existing Internet access services that provides sufficient bandwidth

**Professional Development**

Providing professional development for technology serves three main purposes in our districts:

1. To increase acumen of staff in using technological innovations to work efficiently, effectively and with quality products resulting from their work
2. To increase teachers' aptitude and skill in using technology to enhance student learning
3. To increase teachers' capacity to model the use of a variety of applicable technological solutions to work in academic disciplines

These goals guide our direction in determining what professional development is needed and how to best bring about changes that improve learning and practice through technology. We anticipate that the following types of professional will continue to be offered to our professional staff:

- Use of online learning environment and course management system.
- Training on specific technology applications (e.g. PowerPoint, web page design) will be offered district-wide through institutes, study groups and workshops.
- Building-based technology trainings will be offered on the early release and October Professional Day, as determined by needs assessments, TSAT information and the school's improvement plan.
- A variety to technology training sessions will be offered to all staff on the annual district-wide day of professional development. Both experts from within and outside consultants will be utilized to provide pertinent support to staff members.
- A District Technology Committee consisting of district support personnel, technology specialists and library/media specialists chaired by the Technology Director. This committee develops the technology plans, technology standards documentation in compliance with the DOE Instructional Technology Standards and discusses technology professional development that may be implemented by the school district. This group has been instrumental in bringing technology professional development to staff to increase both professional and classroom use of technology.

## Needs Assessment

- Current Status :
  - Telecommunications and Internet – All Union 61 Schools use a cable modem for access. Each Union61 School has a VPN to the Jr. High DMARC, where all internet access routes. Currently the district has multiple security appliances in place, which perform content filtering, intrusion prevention, gateway antivirus scanning, and spy ware filtering. A direct fiber link from the high school to the junior high provides network access for the high school.
  - Plans are to continue the use of the WAN connections for Internet and email via a single point of access terminating at the Jr. High School building. If the current vendor is contracted for FY07 all equipment and services will remain the same.
- Needs over three years, including current fiscal year:
  - Hardware (School Specific)
    - Jr. High
      - Replace machines that are over 5 years old
      - Continue installing ceiling mounted projectors and interactive boards.
    - Sr. High
      - Replace machines that are over 5 years old. This includes 100 staff computers.
      - Replace CRT classroom television as they start to fail with ceiling mounted LCD projectors
    - Technical Division
      - Replace machines that are over 5 years old
      - Create new CAD lab
  - Telecommunications and Internet – Upgrade the speed of the VPN connections.
  - Review current ISP services and determine the most cost effective and reliable solution.

**Budget Tantansqua/Union 61**

<b>FY10 - Actual</b>	<b>Administrative Technology</b>	<b>Instructional Technology</b>	<b>Technology Professional Development</b>	<b>Maintenance and Support</b>	<b>Networking</b>	<b>Total</b>
Salaries	\$106,862	\$450,719	\$7,388	\$163,000		\$727,969
Contracted Services					\$39,3000	\$39,000
Hardware		\$117,464				\$117,464
Software						
Capital Expenditures						
Supplies		\$12,900				\$12,900
Other Expenditures		\$19,847		\$17,500		\$37,347
<b>Total</b>	<b>\$106,862</b>	<b>600,930</b>	<b>\$7,388</b>	<b>\$180,500</b>	<b>\$39,000</b>	<b>\$934,680</b>

<b>FY11 - Budgeted</b>	<b>Administrative Technology</b>	<b>Instructional Technology</b>	<b>Technology Professional Development</b>	<b>Maintenance and Support</b>	<b>Networking</b>	<b>Total</b>
Salaries	\$106,903	\$453,077	\$7,427	\$169,400		\$736,807
Contracted Services					\$42,800	\$42,800
Hardware		\$184,600				\$184,600
Software						
Capital Expenditures						
Supplies		\$14,100				\$14,100
Other Expenditures		\$19,272		\$14,500		\$33,772
<b>Total</b>	<b>\$106,903</b>	<b>\$671,049</b>	<b>\$7,427</b>	<b>\$183,900</b>	<b>\$42,800</b>	<b>\$1,012,079</b>

<b>FY12 - Projected</b>	<b>Administrative Technology</b>	<b>Instructional Technology</b>	<b>Technology Professional Development</b>	<b>Maintenance and Support</b>	<b>Networking</b>	<b>Total</b>
Salaries	\$111,179	\$459,873	\$7,539	\$172,788		\$751,379
Contracted Services					\$42,800	\$42,800
Hardware		\$150,000				\$150,000
Software						
Capital Expenditures						
Supplies		\$14,100				\$14,100
Other Expenditures		\$19,000		\$14,500		\$33,500
<b>Total</b>	<b>\$111,179</b>	<b>\$642,973</b>	<b>\$7,539</b>	<b>\$187,288</b>	<b>\$42,800</b>	<b>991,779</b>

**Evaluation**

- Evaluation Process
  - Review the technology plan annually to determine if goals are being met and what tasks need to be addressed to accomplish this.
- Corrective Action Plan
- Modify the plan annually.