

STANTON TOWNSHIP PUBLIC SCHOOLS
Educational Technology Plan 2014-2017

School Building

District Code #31140
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Introduction

E.B. Holman School serves the 149 K-8 students of the Stanton Township Public Schools (*Fall of 2013* enrollment). Stanton Township (Houghton County) is a large, sparsely populated rural school district located on Lake Superior in the western Upper Peninsula. There is 65 percent of Stanton’s children that are eligible for free or reduced lunch (*Fall of 2013* numbers) The county’s median household income is nearly one-third below Michigan’s (Michigan, \$48,471; Houghton County, \$34,453; United States Census Bureau 2008-2012). Outside of the public schools, there is a distinct lack of educational resources and opportunities in the region’s isolated former mining towns. With few libraries and no park districts or YMCA’s, the area lacks youth-enrichment activities traditionally found in more populous areas.

Despite these challenges, Stanton students have positive results on the MEAP tests and perform well when they leave the district in 9th grade. Factors that contribute to school success include the experienced and dedicated staff, the low student-teacher ratio (average class size of 17), and the outstanding quantity and quality of parent support and involvement. In addition, several new programs at E.B. Holman have bolstered the small school’s traditionally strong academics. Through ongoing community collaboration including Michigan Technological University and the Copper Country Intermediate Schools, teachers have developed a strong curriculum. By maintaining its independence in an era when funding formulas often favor large, consolidated districts *and State budgets are woefully inadequate*, the Stanton Township Public Schools manage to preserve the personal “family style” approach to education that has proven so successful in meeting the individual needs of students.

District Mission Statement

The Stanton Township Public Schools believes in nurturing all students' intellectual, creative, emotional and social skills, empowering students to be lifelong learners. We will respect and encourage ourselves and each other and appreciate individual differences.

Technology Plan Summary

Vision

During the next three years, the district will continue to address staff development needs to ensure that students receive instruction utilizing the most affordable technologies. The district also will continue to develop community partnerships to provide real-life applications for students and ensure sustainability of technology systems and to meet the Standard's set forth by the State, NCLB and ISTE.

Goals

The following four goals were established through a community visioning and planning process. The Stanton Township Public Schools will:

- ▶ Provide a real-world learning environment, *enriched by service learning and place based instruction*
- ▶ Develop the perpetual viability of technology systems
- ▶ Build long-term partnerships to support learning
- ▶ Be *the school of choice* for our community

Planning and Evaluation

A District Technology Committee, composed of two Board of Education members, the Superintendent, staff, students and community members meets periodically and conducts systematic planning and evaluation. The committee assesses resources and needs, infrastructure, technology curriculum integration, staff development, and progress toward achieving strategic technology goals. Findings and recommendations are reported at monthly Board meetings.

Technology Coordinators

Two teachers and the school technology liaison assist the Board, Administration and staff in ongoing technology planning and implementation.

Required Elements of an Educational Technology Plan

1. Technology Delivery

The Stanton Township Public Schools computer network was completed during the winter of 1999-2000. A wireless point-to-point link provides high-speed data and communication exchanges for the school administrators, every classroom, both computer labs and the library. Students have access to the internet via computers in every classroom and access to iPads for all K-8 students.

Management of the network is accomplished using redundant Dell Power Edge 830 servers installed in 2006. Internet filtering is provided by AVG, which is installed on the file servers. Two professional staff members serving as Technology Coordinators administer the management systems.

All teachers have access to lap-top computers and iPads. Power School software has been installed in grades K-8 to enable teachers to produce student assessment data and grade reports.

The Stanton Township Public Schools has also installed a science exploration lab for grades 6-8 in 2006. A second computer lab was outfitted in 2006 which serves the Middle School and Elementary School. Every classroom was outfitted with new computers in 2006. In June of 2013 Stanton Township Public Schools updated some equipment through a donation of 25 used computers and monitors from another district.

The school is served by a school wide wireless network which has increased access throughout the classrooms and the potential for increased internet explorations and virtual field trips.

Partnerships with Michigan Tech University and other public and private entities provide real-life learning opportunities for Stanton Township Public Schools students. The Lake Superior Stewardship Initiative, the Learn and Serve America Initiative and the school forest initiative provides students with an extended classroom.

2. Curriculum Integration

The Stanton Township Public Schools has adopted a locally developed core curriculum aligned with the Michigan Frameworks and consisting of goals, objectives, lessons and resources in the areas of mathematics, language arts, science and social studies. In June 2002, teachers

completed a survey of state benchmarks versus learning objectives at every grade level and crafted a matrix documenting the learning sequence in core subjects. The staff follows an annually reviewed and updated technology curriculum commensurate with the District School Improvement Plan and aligned with state benchmarks.

In accordance with District philosophy and vision, technology is more than just as a list of skills to be acquired separately. Instead, students understand that technology offers the means to more effectively learn, problem solve, communicate and accomplish tasks. In other words, we view technology as a means to a greater end.

In today's world of work, technology is an integral part of doing business. The use of partnerships, integration across the curriculum and staff development are necessary to prepare students for the larger world around them and the demands that will be placed upon them by a society and economy increasingly driven by advancing technologies.

The Stanton Township Public Schools recognize that change is occurring at an increasing rate in every field of knowledge and there is a constant stream of new information to be considered. Technology and partnership will continue to support the core curriculum. Continued staff development and the pursuit of appropriate partnerships with community agencies and corporations will provide an interesting real-life environment which meets the needs of our students.

ELEMENTARY TECHNOLOGY OVERVIEW GRADES K-5

K-5 students will have experiences in word processing at all elementary classes, as well as the introduction of desktop publishing to students in grades 2-5. All K-5 classes will have access to iPads to incorporate blended learning for the purpose of deeper understanding of core curriculum and to further their growth with technology. The Elementary teachers will also incorporate a project oriented strategy i.e. multimedia projects, multimedia reports and the use of online resources to integrate the use of technology resource into the curriculum.

JUNIOR HIGH SCHOOL TECHNOLOGY OVERVIEW GRADES 6-8

The Junior High School Curriculum will build on the skills learned at the elementary level. The Sixth Grade goal is that students will enter the Junior High school being able to type twenty words per minute at 90% accuracy. The Junior High school will integrate typing throughout the curriculum to reinforce these skills. Students will further their knowledge by completing courses in word processing, multimedia, database and spreadsheets throughout their Junior High experience using proper computer etiquette. All Junior High classes will also have access to iPads to integrate across the curriculum and incorporate blended learning for the purpose of deeper understanding of core curriculum and to further their growth with technology.

Teachers will integrate word processing skills into their courses at the seventh and eighth grade levels. The seventh grade courses will integrate multimedia across the curriculum wherever possible, exposing students to the more advanced features of multimedia as a communication tool. The eighth grade courses, across the curriculum, will integrate database and spreadsheet applications wherever possible.

Although the internet provides reasonable access to distant resources, the district will plan to investigate and integrate video conferencing equipment.

TIMELINES:

2014-2015

- Update servers
- Update computer lab 1
- Key Pads for iPads
- Update and improve access points

2015-2016

- Update computer lab 2
- Ceiling projection and units for middle school
- Portable doc-cams
- Technology training for staff

2016-2017

- Purchase of more iPads, iPad carts and covers
- Ceiling projection and units for upper elementary classes

3. Collaborations

The Stanton Township Public Schools is not a direct provider of adult literacy services due to its limited resources and limited community need. This role is fulfilled by community partners including the Copper Country Intermediate Schools, Michigan Works, and Parents are encouraged to participate in several evening family learning programs. These programs open to the general public; include Family Science Nights, Math Nights, art and music programs, and other intergenerational learning opportunities provided by the District in collaboration with community entities including Michigan Technological University, the ISD and many others.

The District has partnered with a number of organization including Michigan Tech, Finlandia University, and Western U.P. Science, Math and Environmental Education Center; REMC-1, McLain and Fort Wilkins state parks; and regional science fairs, Touch the Future career exploration program, and other educational partnerships. Collaborations have assisted the Stanton Township Public Schools with technical issues, have enhanced connectivity and have also helped to provide real-life experiences and projects for students.

4. Professional Development

The District provides limited funds for technology training, conferences and presentations as per School Improvement Plan or Individual Development Plan. Faculty and staff are encouraged to attend all relevant training provided at the CCISD. Training is available to all faculty and staff regardless of position in the school district, and each time new technology materials are purchased; training is sought for any personnel utilizing that technology.

The District School Improvement Plan also includes a strong commitment to training. The plan specifies that:

- ▶ All non-teaching staff will attend at least one professional development session per year.
- ▶ Teaching staff will attend at least five professional development sessions per year. Teachers will share what they learn with other staff members.
- ▶ School board members will attend at least one professional development session per year.
- ▶ Additional PowerSchool Professional Development to support PowerSchool.
- ▶ Additional Video Streaming and iPad Professional Development will be offered for teachers and administrators.

The teaching staff and the administrator currently attend a half day in-house professional development session several times per year to address curriculum development, technology training and other topics jointly agreed upon. These sessions are determined at the beginning of each school year.

The Stanton Township Public Schools is also committed to coordinating staff needs assessments and assessing individual staff development needs each year. Every fall, the Superintendent reviews individual professional development plans with each staff member and assists, along with the Technology Coordinators, in identifying in-house and external resources. The Superintendent monitors progress toward professional development goals.

5. Supporting Resources

Stanton Township Public Schools does not have the resources to employ regular technical support staff, although some technical support is provided by the in-house Technology Coordinators. REMC-1 (Hancock) technical support staff provides limited further technical assistance to the District as needed. The District also pursues community partnerships to support technology. Community members have been employed to assist in tech support.

6. Technology Resources

The Stanton Township Public Schools has policies which address the accessibility and use of the districts resources by students, faculty, staff, administrators and the community. Policies in effect are: Computer Technology and Networks #7540, Technology Privacy #740.01 and Acceptable use of the Internet #7540.03. Students and staff are also required to sign internet permission and usage forms. The integrity of the network is protected by administrative software installed on the network server and security is maintained by user password.

The District maintains an inventory for resource purposes and for internal control. Hardware, software and on-line resource selection criteria are based on the Technology Plan and Michigan Frameworks documents. District Technology Coordinators assist other teachers with the ongoing task of keeping current on the best and most appropriate on-line sources for software, curriculum and student research.

Human resources include our technologically literate staff, two Technology Coordinators, and community partners.

7. Strategic Plan

1-3 Years: The Stanton Township Public Schools will remain the district leader in the effective use of technology in education.

A. Ongoing Planning and Evaluation

1. The Technology Committee, with representation from the school board, administration, teachers, students and community, will meet as needed.
2. The Committee will conduct an annual district technology audit.
3. Every year, staff will be given the opportunity for technology training and will be updated on current usage.
4. When hiring staff, the District will consider whether they have the technological literacy and skills to effectively perform their jobs.

B. Infrastructure

1. Hardware will be updated to continue to meet educational needs and reflect current technologies as deemed necessary by the Technology Committee as the budget allows.
 - Two additional servers were installed in 2009 as well as additional storage

- New iPads were purchased in 2013
2. Software will be updated to continue to meet educational needs and reflect current technologies as deemed necessary by the Technology Committee as the budget allows.
 3. Networks will be updated to continue to meet educational needs and reflect current technologies as deemed necessary by the Technology Committee as the budget allows.
 4. Technical support expertise will continue to be developed. Currently, support is provided by a vendor who has experience supporting university systems and who has enabled partnering with Michigan Technological University.
 5. A regular preventive maintenance schedule will be developed and implemented.
 6. The Committee will evaluate infrastructure needs annually.
 7. In 4/06 – Installation of 38 Dell, Opti Plex 170L, desktops with Celeron processors
 8. In 4/06 – Installation of network upgrades, 3-100 mbs switches and a wireless network in the administrative space.
 9. The district website was newly developed in 2007. The Tech Plan will be posted and available to the community on the district’s website. Tech meetings are posted as required and parent/community attendance is encouraged.
 10. The district is planning to acquire and install the following equipment:
 - Network upgrades
 - Improve and increase the number of access points
 - Server upgrades
 - Mobile doc-cams
 - Additional computer projectors
 - Additional iPads for classrooms

C. Integrated Curriculum

1. Benchmarks for student technology skills will be developed which meet or exceed local, state and national standards. Instruction and practice will be instituted at every grade level to meet the benchmarks.
2. Technology will continue to be used as a tool in project-based instruction that bridges content areas and provides real-world applications and opportunities to develop skills such as teamwork, problem-solving and critical thinking.
3. Internet – Computers and iPads for grades K-8, are networked and internet capable. The internet is used in the classroom to provide access to web resources used for gathering information and research. The internet is also used for administrative and teacher

resources and allows access to simple queries, research and access to online forms and documents required to conduct the business of public education.

4. E-mail – Computers and iPads for grades K-8 are e-mail capable. E-mail allows students to learn to communicate in a responsible ethical manner with others in their world. E-mail also allows teachers, parents and administrators to communicate with peers and to conduct the business of education.
5. Telecommunications – The districts wireless WAN connection enables efficient internet and e-mail communications. The districts telephone and fax lines enable students, staff and administrators to effectively conduct required business.
6. Network – The network enables efficient resourcing and technology curriculum integration.
7. Video Conferencing – The installation of video conferencing equipment expands the possibilities of technological integration into classrooms and administrative practices. Video conferencing enables the students and staff to participate in virtual field trips and to visit other people and locations across the globe. Teachers and administration would be able to attend meetings and conferences.

D. Collaboration

1. The District will promote the concept that partnerships are a powerful aid to the integration of technology in education.
2. The District will build mutually beneficial alliances with families, local businesses, corporations, universities and colleges, non-profit organizations and governments to build capacity, share expertise and develop sustainable programs.
3. The Stanton Public Schools will seek the involvement from parents and the community in a variety of ways including:
 - Continue to use and encourage the use of e-mail communications with staff
 - Providing Access to student data base provided by PowerSchool
 - Continue to publish the monthly school events calendar
 - Continue to publish the annual report
 - Develop a sustainable school website

8. Three-Year Cost Projections	2014-2015	2015-2016	2016-2017
STAFF DEVELOPMENT	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00
SUPPLIES	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00

CONTRACTED SERVICES	\$ 6,000.00	\$ 5,000.00	\$ 3,000.00
EQUIPMENT COST	\$ 12,000.00	\$ 15,000.00	\$ 15,000.00
LICENSE AGREEMENTS	\$ 400.00	\$ 1,000.00	\$ 400.00
Security			
TELECOMMUNICATIONS COST	\$ 12,500.00	\$ 12,500.00	\$ 12,500.00
(Wireless WAN connection, local, long distance, cell)			

Expenditures for which the district request USF is as follows:

- Internet Access – normally supported by USF, FCC E rate at 80%
- Telecommunications – normally supported by FCC E rate at 80%
- E-mail/Internet access normally supported by FCC E rate at 80%
- Network upgrade, server, internal connections, new switches and increased access normally not funded by FCC E-rate, discount rate 80%

9. Financial Resource Coordination

Following its annual infrastructure review, the Technology Committee prioritizes immediate and long-term technology needs and presents cost estimates to the School Board and its Finance Committee for consideration. Thanks in large part to Tech-Lit and Goals 2000 grants written by staff over the past few years, Stanton Township Public Schools is consistently working on improving its technological standards. Grant funds have also enabled the District to invest heavily in staff development. Appropriations for network and hardware maintenance have been included in the District budget process for several years. USF funds contribute a large portion of telecommunications costs. The 2006-2007 school year marked the first year of USF appropriations for hardware. New computers were installed in 2006, financed over a three year period with a purchase option.

Coordination of resources in terms of continuing staff development, establishing community partnerships and planning for the replacement of equipment will enable the district to perpetuate the technology program. The pursuit of grant sources will be required to support the majority of the strategic technology plans; however the district will also pursue partnerships with businesses, agencies and parents in the greater community.

10. Evaluation

The District currently uses MEAP tests, DIBELS tests, and EasyCBM test as part of a formal testing program to evaluate the progress of students in comparison to state and national standards. The district also uses pre and post assessments and assesses student achievement with the Michigan Literacy Portfolio and curriculum-specific instruments. The teaching staff will also continue to receive training in new assessment procedures, such as rubrics and various authentic assessments.

The District will also systematically evaluate technology needs and progress toward goals on a regular basis, as follows:

1. The Technology Committee, with representation from the school board, administration, teachers, students and community, will meet as needed
2. Every fall, the Committee will review progress made in the previous year toward strategic goals, and set annual goals.
3. Every fall, staff members will come together and meet to review and discuss Technology Professional Development Plans.
4. When hiring staff, the District will assess each applicant's technological literacy and skills relative to the desired qualifications of the position.

11. Acceptable Use Policy

- ▶ The District's internet filtering is provided by REMC1, Bess system. The system is installed and functional to filtering according to users including internal staff and external educationally linked users.
- ▶ All students must have signed parent approval of internet usage before getting on line
- ▶ All staff must have signed school internet usage form

See attached.