

# **Smith Vocational and Agricultural High School**

## **5 Year Technology Plan**

2014/15 – 2018/19

# Table of Contents

## Executive Summary

• Introduction & History	1
• Vision and Mission	2
• Overall District Goals	3
• Integration of Technology	4
• Resources and Evaluation	5
• Professional Development & Training	6
• Accessibility of Technology	7
• School Connectivity	8
• CIPA Compliance	9
• Conclusion	10
• Use Agreement Policy	11

# 1 - Introduction and History

The concept of Technology in Education really took off during the early 2000's . Since then, computers have become an integral part in the classroom, lesson plans and with assisted learning. Virtual classrooms are quickly becoming an alternative to traditional education in brick and mortar. Smith Vocational and Agricultural High School is dedicated to changing with the times. This technology plan is our blueprint for how Smith Vocational and Agricultural High School plans to move forward with our school technology and reflects the goals and initiatives of the government's standards and past technology plans.

Smith Vocational and Agricultural High School was established as a result of a bequest in the will of Oliver Smith. Mr. Smith was born in Hatfield, Massachusetts in 1766. He engaged in farming at an early age and acquired large wealth by stock-raising. He was a magistrate for forty years. Twice he was a representative to the legislature and in 1820, he was a member of the State constitutional convention. He never married and may have been considered eccentric by his neighbors. However, he amassed a large fortune, which he bequeathed to establish the "Smith Charities," a unique system of benevolence. At his death in 1845, his estate was valued at nearly \$400,000 and the will was contested by his family. Legendary lawyer and legislator Daniel Webster successfully defended the will for the city of Northampton. The fund for the Agricultural School became available for use in 1905, and the amount of \$50,000 was turned over to the City of Northampton for the purchase of land on which to build Smith School. The school opened for students in 1908 as the first vocational school in Massachusetts.

Since 1845, when the fund to develop an agricultural school was established, Smith Vocational and Agricultural High School has been at the forefront of a movement toward excellence in vocational training. Today, Smith Vocational and Agricultural High School is a public high school for residents of Northampton and tuition students from all of Hampshire County on a "space available" basis. Students spend alternating weeks in shop and academic programs as they prepare for both a high school diploma and a Certificate of Occupational Proficiency. Graduates of Smith School are expected to meet academic standards, achieve occupational competency, develop ready-to-go work skills, and prepare for continuing education. Integration of technology in course work is encouraged, and students have access to state-of-the-art computer labs with Internet capability. A focus on the acquisition of key life skills- good work habits, reliability, self-confidence, resilience, problem-solving-serves to guide students in their personal growth.

## 2 - Vision and Mission

The mission of Smith Vocational and Agricultural High School is to prepare students for social responsibility, employment, and post-secondary education through rigorous, applied technical and academic programs.

As a school community we believe that we must:

- foster an understanding of the value of education so that students become lifelong learners
- model an attitude of personal, professional, and institutional excellence.
- respect the diversity of our multi-cultural society by recognizing and affirming the inherent worth and dignity of all people
- encourage non-traditional career path choices by actively working to eliminate racial, cultural, and gender biases.
- continually develop curricula that nurture students' self-esteem and inspire them to strive to reach their full potential
- promote a positive, safe, structured, and challenging climate in which all students can succeed

Smith Vocational and Agricultural High School will provide current and innovative resources for increasing student learning and achievement. SVAHS will also provide current and innovative Resources to Meet State Reporting Requirements and to Leverage Data for Student and District Excellence.

SVAHS will deploy technology to help the learning opportunities for all of its students. While most students have computers at home there are still some that do not. With having a few computer labs working in conjunction with multiple Chromebook and Laptop carts all students have increased access to technology resources. At SVAHS we are near 2:1 students per computer which is great improvement and is exceeding the state average. Along with resources that are available during school hours, the library is also open after hours for those to utilize its technology.

Educational technology has the ability to allow students to learn in an adaptive ways. Touch screen, voice command, speech to text, all have played an important role in education with students who have a learning disability. 37% of student have a learning disability and with the mobility/capability of current technology we are able to keep these kids in classes and in a normal learning environment.

### 3 – Overall District Goals

Smith Vocational and Agricultural High School will strive to:

- Provide current and innovative resources for increasing student learning and achievement.
- Provide current and innovative resources to meet state reporting requirements, and to leverage data for students and district excellence.
- Create the appropriate and effective use of technology into classrooms on a daily basis as recommended by the Massachusetts Technology Standards;
- Provide all departments with the hardware and software needed to support their classes and student needs;
- provide Internet access both during and after school hours;
- use technology to communicate efficiently internally, with parents and with the local and global community;
- provide standards-based technology instruction in an equitable manner to all students;
- nurture the creativity, inventiveness and curiosity of its students by cultivating real-world problem solving skills using technology resources where applicable;
- provide high quality professional development opportunities to its teachers and staff so that they are able to use the technology resources available to them to more effectively and efficiently achieve their professional goals as well as the goals of their school and the district;
- utilize technology to maximize efficiency within the classrooms
- provide the tools and software to disseminate any required data collection, including but not limited to attendance data, MCAS data, SIMS data, Financial data, student grading systems and any required reporting by the Massachusetts Department of Education, State and Federal agencies.

SVVHS will use the following methods to reach over goals:

- Access to Technology Tools
  - Continually refresh and redeploy computer, network, and interactive infrastructure and equipment.
  - Maintain Network Resources that are stable and scalable, and a disaster recovery plan well documented.
- Provide Access and Collaborate in Training Programs and Models
  - Maximize the value of technology investment.
  - Inform and inspire innovation in faculty, staff and students
- Develop Technology Planning and Integration Team
- Implement, Research, Encourage, and Design Innovative Technology Teaching Environments

## 4 – Integration of Technology

In 2013, SVAHS upgraded their student information systems from Starbase to PowerSchool Premiere. This is hosted by Pearson and is 100% web based. Our goal is to have at least 90% of teachers using technology during their class on a daily basis. By switching to more web based programs, it allows students and teachers to collaborate remotely and on a regular basis.

Currently near 90% of employees use technology outside of school, where near 95% use it during school hours. Our goal in the near future is to move both those numbers to 100%. We can accomplish this by appropriate training and technology resources such as iPads, Laptops and Chromebooks. We are at 100% coverage of physical networking to help connect classrooms to the internet. We are also near 90% coverage of wireless network connectivity. Currently all faculty at SVAHS have been assigned either a desktop or a mobile device to be used for grading, lesson planning, etc. Our plan is to move from desktop computers to mobile devices to allow flexibility for teachers.

Currently near 95% of students use technology outside of school. Along the same lines near 95% of students use technology during school hours. In particular, during school hours students are assigned work within web-based programs such as Google Apps, ALEK, etc. Our goal at SVAHS is to move both those percentages to 100 within the next 5 years. To accomplish this we plan to implement more Google Chromebooks to classrooms and work towards a 1:1 plan.

At least 80% of teachers are working to meet proficiency level in technology and our goal by the end of these 5 years is to have 95% at the proficient level. Our goal is to use the Massachusetts Technology Self-Assessment Tool (TSAT) to gauge and identify target areas for training. Over the next 5 years, with the appropriate funding, to increase the professional development so that staff is on the same comfort levels with a wide variety of educational technology.

The district has a CIPA compliant Acceptable Use Policy (AUP) regarding Internet use. This goal has been satisfied district wide. All students and staff are required to sign the Internet Use Policy before accessing the internet or using technology within the school. SVAHS has top of the line firewalls and content filtering in place to enforce this policy as required by the state. SVAHS will continue to be CIPA compliant making adjustments as needed.

### Specific Integration Plan

- To upgrade one lab of 20+ computer labs per fiscal year.
- To upgrade all software and licenses per fiscal year to the newest version.
- To add one chromebook cart of 18+ devices per year
- To upgrade at least 10 staff member's device such as iPad, Chromebooks, Laptops etc.
- To add at least 2 interactive whiteboards and projectors per year.
- To seek out alternatives for audio/video system in the gymnasium.
- To move from Windows XP to Windows 7 on all computers
- To increase bandwidth of internet service by joining the fiber project.

## **5 – Resources and Evaluation**

### **District Technology Team**

Our goal at Smith Vocational and Agricultural High School within the next 5 years is to create a team of personal consisting of administrators, members of the high school, and central office support staff. This team will be tasked with the selection and implementation of specialized or highly needed technology. They will also have the task of developing technology-centered professional development.

### **Budget**

The Annual operating budget contains line items for the following technology components:

- Staffing
- District Hardware
- District Software
- Professional Development

Smith Vocational and Agricultural High School leverages the use of federal, state and private resources. As the results of fiscal constraints, the budget for technology funding has/will be seeing the back seat to staffing and other necessary district services. The goal of SVAHS is to educate the members of the town as to the importance of adequately funding budgets to address these needs. Another goal is to search out appropriate grants to help support our technology needs such as SmartBoards, Chromebooks, etc. Within the past few years the use of grants to supplement the technology budget has not be utilized.

### **Evaluation**

The goal at Smith Vocational and Agricultural High School within the next 5 years is to utilize the TSAT to evaluate our staff technology competency level. Currently we are using Survey Monkey to assess staff and student proficiency. Another goal is for the District Technology Team to evaluate the professional development needs among district staff.

## **6 – Professional Development and Training**

Technology professional development is sustained and ongoing and includes coaching, modeling best practices, district-based mentoring and study groups. At SVAHS we have weekly professional development located in a state of the art computer lab. These trainings model an “open forum” or subject defined classes focusing on the most current and needed programs/questions. Our goal, as previously stated, is to create a District Professional Development Team who will be tasked with searching out the needs and problem areas that can be taught during our weekly meetings. Our professional development has been a proven way for faculty to fully leverage the existing technology infrastructure and better utilize the feature of available computing systems, both in and out of class.

Besides planned professional development days both the IT staff and several champion users provide ongoing mentoring and hands-on training for the use of existing and emerging computer systems. The need for all staff within the district to be assessed and monitored in technological competency areas by TSAT assessment tool and other surveys annually is at the utmost importance. This is help the school better understand our technological strengthens and weaknesses.



## **7 – Accessibility of Technology**

Smith Vocational and Agricultural High School have made significant strides within the past years regarding accessibility of technology. In particular, student to computer ratios are now less than 3:1. The innovative use of Chromebooks and other wireless devices have helped make this ratio reality. Currently having over five Chromebook laptop carts alongside of strategic development of computer labs facilities has allowed teachers to fully integrate technology into their classrooms.

Our goal is to reach 2:1 or 1:1 within 5 years by supplementing our inventory with the versatile Chromebooks. As result, SVAHS has to turn its attention to lifecycle funding to make sure our computer inventory does not end up outdated and unusable. Cycling which labs get updated per year plus the addition of new, cheaper chromebooks have been proven an effective way to reach our new ratio goal.

## **8 – School Connectivity**

All Classrooms and instructional/staff computers through the Smith Vocational and Agricultural High School campus are connected to the internet via Local Area Networks. Along with being physically connected, near 90% of the campus is also connected via Wireless LAN. Our goals in the next 5 years are to reach 100% coverage including sport fields and parking lots for when outside activities are taking place.

Computers and internet connectivity is accessible throughout the school day as well as before and after school hours. Buildings open around 6am where students are allowed to access our wireless network. After school building are left open and labs/wireless are available for students to do school work. Our goal is to extend the after-hours availability.

## **9 – CIPA Compliance**

Smith Vocational and Agricultural High School has implemented a state of the art web filtering system to block access to inappropriate content on all its computers wired or wireless. This includes any computers that are brought in from home. Staff members are able to monitor student computer use as well. In addition, students are required to read and sign a User Contract agreeing to follow the computers and Internet use policy at all times.

## 10 – Conclusion

In conclusion, Smith Vocational and Agricultural High School has been making major technological improvements through the past few years. We have implemented, an entirely new wireless system to obtain near 90% coverage, began BYOD (Bring Your Own Device), upgraded from outdated student information systems to the newest top of the line PowerSchool system, and transitioned from out of date infrastructure to high-end state of the art networking devices. SVAHS has been making the right moves in the right places but still has a lot of room to grow. Focusing on professional development and keeping hardware within 5 years old has been a constant struggle. With the continued improvements we will see all our goals met within this 5 year plan.

# 11 – Acceptable Use Policy

## Smith Vocational and Agricultural High School Technology Acceptable Use Policy

### Purpose

Smith Vocational and Agricultural High School shall provide access for employees and students to the system/network for limited educational purposes. Educational purposes shall be defined as classroom activities, career and professional development, and high quality research or self-discovery activities of an educational nature. The purpose of the system/network is to assist in preparing students for success in life and work by providing access to a wide range of information and the ability to communicate with others. The system/network will be used to increase communication (staff, parent, and student), enhance productivity, and assist staff in upgrading existing skills and acquiring new skills through a broader exchange of information. The system/network will also be utilized to provide information to the community, including parents, governmental agencies, and businesses. This is not limited to physically wired devices but also wirelessly connected as well. This also includes activity performed on personal devices while connected to the schools network. The purpose of this policy is to meet the demands of state and federal law and to provide guidelines for legal, moral and ethical use by our students and staff. Staff/Students should be aware that all rules of public record and confidentiality apply in the digital world.

### Availability & Monitored Use

Use of this Network is a *privilege*, not a right. The superintendent and/or technology administrator shall implement, monitor, and evaluate the district's system/network for instructional and administrative purposes.

Electronic mail transmissions, including all messages and information, sent or retrieved over the Internet, are the property of the SVAHS and shall not be considered confidential. Copies of all information created, sent, or retrieved are stored on the District's back-up system. While the District does not plan to review cache files or back-up files on a regular basis, the District reserves the right to access and monitor all messages and files on the computer system as it deems necessary and appropriate in the ordinary course of its business for purposes including, but not limited to, ensuring proper use of resources and conducting routine network maintenance. Where appropriate, communications, including text and images may be disclosed to law enforcement officials or other third parties without prior consent of the sender or receiver. As a result all incoming and outgoing messages and attachments are subject to being accessed, reviewed, disclosed or monitored. This monitoring will be done at the sole discretion of the school's superintendent and/or the technology administration during ordinary course of business, at any time, with or without notice, notwithstanding any password.

Google email accounts will be supplied to all Staff and Students. These accounts and activity performed while signed in are logged and stored in an electronic format. Monitoring of these accounts will be done by the IT Director and/or administrative team. When a student has left the school system for any reason their account and all data within will become archived and frozen. Staff and students are held responsible for all activity that occurs while signed into their google email account, this includes but not limited to all web traffic, downloads and uploads. Passwords are NOT to be shared with anyone but the owner of the account.

### **Liability**

SVAHS shall *not* be liable for users' inappropriate use of electronic resources or violations of copyright restrictions, mistakes or negligence, or costs incurred by users. This may include such acts as downloading of pirated material. If any requests are made of SVAHS to provide information on users resulting from the above noted acts, this information will be provided. SVAHS shall *not* be responsible for ensuring the accuracy or usability of any information found on the system/network, nor be liable for any loss, or corruption of data resulting while using the Internet. Inclusive, Staff and Students *are responsible, and accountable* for financial damages that occur with *any* SVAHS technology equipment while in their possession. Parents who do not want their child to use the Internet during school hours must notify the school principal in writing.

The system/network **MAY NOT** be used to:

- Create or disseminate any offensive or disruptive messages. (Including, but not limited to material which contains sexual implications, racial or ethnic slurs, or other comments that offensively address someone's age, sex, sexual orientation, religion, national origin, ancestry or disability, or to communicate improper messages or material that is defamatory, derogatory, obscene, or otherwise inappropriate.)

- Violate any law, regulation, or school policy. Staff/Student must not visit sexually explicit, offensive or otherwise inappropriate Web sites.

- Staff/Student are expected to abide by the generally accepted rules of network etiquette that includes, but are not limited to, the following: Be polite, use appropriate, non-abusive language (The staff is cautioned and students are prohibited from revealing personal addresses, credit card numbers, or phone numbers)

- Copyrights and intellectual Property

The Smith Vocational and Agricultural High School District does not condone the illegal duplication of software. All information posted on the internet, also called intellectual property, is considered copyrighted unless specifically stated otherwise.

### **Bullying/Cyberbullying**

Bullying through the use of technology or any electronic communication, which shall include, but shall not be limited to:

Any transfer of signs, signals, writing, images, sounds, data or intelligence of any nature transmitted in whole or in part by a wire, radio, electromagnetic, photo electronic or photo optical system, including, but not limited to, electronic mail, internet communications, instant messages or facsimile communications. The creation of a web page or blog in which the creator assumes the identity of another person.

Cyber-bullying, is in all essence, bullying. ANY off site or on school property evidence of cyber-bullying will involve disciplinary action set forth by SVAHS, Technology Department, and Law Enforcement if necessary. SVAHS Parents and students have the responsibility, and are accountable for being educated in these areas, and be fully aware of its warning signs of Cyber-bullying and its consequences.

### **Social Media Use**

The term social media describes media that is posted by the user and can take many different forms. Some types of social media are forums, message boards, blogs, wikis and podcasts. Examples of Social media applications include Google, Facebook and YouTube.

The misuse of social media by any staff or students at SVAHS will not be tolerated. SVAHS will be in complete compliance with the laws applicable to the misuse of Social Media.

At SVAHS you will, AT ALL TIMES:

- ☐ Refrain from disclosing confidential information.
- ☐ Refrain from use social media during school hours.
- ☐ NOT use SVAHS corporate email as a link to social media sites.
- ☐ Restrict the posting of knowingly false information.
- ☐ Teachers must refrain from using social media to engage in personal relationships with current students

### **Sanctions**

Violation of any of the above stated rules and regulations are subject to the following sanctions.

1. Temporary or permanent ban on internet/computer use.
2. Parents/caregivers will be informed.
3. Additional disciplinary action may be set forth by SVAHS.
4. When applicable, police or local authorities may be involved.
5. If necessary, external agencies such as Social Networking or Email Member sites may be contacted and informed.

**-For Staff**, a violation of this policy may result in: Disciplinary action ranging from a verbal warning or suspension of system privileges up to discharge from employment. For both when applicable, law enforcement agencies may be involved.