## Technology Plan 2015-2018

**HOPE for Hyndman Charter School** 

Version 1.0 March 3, 2015

Presented by Justin Keel Chief Technology Administrator

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## HHCS Technology Committee

Member	Position/Title
Malynda Maurer	CEO
Erich May	Principal
Justin Keel	Chief Technology Administrator
Twyla Haines	Math Teacher/eLearning Coordinator
Dina Morrissey	Special Education Coordinator
Juan Ryan	Maintenance
Ron Gibbner	Board Member
Ron Scritchfield	Board Member
Jerry Leydig	Board Member

#### **Preface**

#### Mission

HHCS a community-oriented lifelong learning environment which both reflects and helps to shape Hyndman and its surrounding areas. Striving for high academic achievement and a high rate of post-secondary continuing education, HHCS extends the conventional K-12 classroom teaching/learning boundaries to include varied educational endeavors, employing multiple mediums, settings, and locations to model and promote the practice of lifelong learning. We recognize that each child is an individual and that they are all creative and need to succeed. Therefore, HHCS respects and strives to meet the individual needs of all of our children in a caring and creative environment and we emphasize the social, physical and intellectual development of each child.

#### Vision

#### **BRING** TO $\mathbf{BY}$ Regarding students and staff as Help Students individuals **O**pportunities Staff Providing small, safe, and $\rightarrow$ $\rightarrow$ **P**racticality Community nurturing community centered **E**mpowerment environment Encouraging students and staff to be their best Working with area businesses and community members

#### Core Values

- Compassion Respecting the individual enough to discover if they need sympathy and/or empathy.
- **Respect** A positive attitude towards and acceptance of yourself and others despite differences in opinions and beliefs.
- **Integrity** A combination of values and morality culminating in a general concern for others when you are being watched and not.

#### Beliefs

#### What do we believe about HHCS?

- 1. We believe in connecting with the community to be successful in educating the students and their families.
- 2. We believe in the innovative, diversified, individualized, and quality education provided at HHCS.
- 3. We believe the opportunities provided at HHCS will help prepare life-long learners.

#### What do we believe about teachers and teaching?

- 1. We believe teaching is a two-way road where teachers teach students and students teach teachers.
- 2. We believe teachers will know each of their students and are willing to meet individual needs.
- 3. We believe teachers are life-long learners.

#### What do we believe about how students learn?

- 1. We believe that students are individualized learners that can be challenged with their own unique academic level through hands-on, immersive learning styles that vary depending on academic needs or wants.
- 2. We believe that all willing students have the ability to learn, at any given time, about any subject that is intrinsically motivating or holds real world connections, for a lifetime.
- 3. We believe that educators should facilitate learning by setting an example and by providing each student with the chance and/or opportunity to learn in a space that is a positive learning environment.

In 2013, the school engaged in a Comprehensive Planning Process. During that process we reviewed our the mission, vision, values, and beliefs statements above and attempted to boil them down into a set of "mantras" that we could use to guide our decision making in a variety of circumstances. These mantras are the words that best represent the culture we work to maintain:

#### K-12 Mantras

- a. Opportunity
- b. Community
- c. Individualized attention
- d. Vested
- e. Family

#### Reflections

In the 2012-2015 technology plan, concerns were expressed about the basic technology infrastructure and hardware. In response to this plan the charter school completed several projects to improve the situation at the school. These projects included the adding of an Active Directory server, a firewall/filter device, a centrally-managed wireless system, replacing all staff laptops, replacing all desktop computers in computer lab 106, providing projectors for each classroom, acquiring updated software for staff and students, and providing a method for students to bring and use their own technology. Current software and equipment lists are provided in the appendix.

Also in the 2014-2015 school year, additional devices were purchased for copy/print functionality through the building. Three new and one used device were purchased for centralized printing in the staff member's area of the building. See appendix for hardware details.

#### **Needs Assessment**

An informal survey of school students, faculty and staff provided the following data. Over the previous three years, we have improved the overall technology infrastructure of the school and provided updated software. This leaves the number of student devices as the main area that is lacking. Of all of the parties surveyed, the number of available student devices is the primary concern. In addition, all of the Mac computers left to the school from the Bedford Area School District are past end of life and are in need of replacement.

Three other issues were identified during this survey. In room 114, the network switches have been placed in a metal closet in the classroom. This location does not provide adequate air circulation for the switches and it creates distracting noises in the classroom. Additional areas for security cameras have been identified. Currently we have 16 cameras in our system (the maximum). The DVR equipment would need to be upgraded to allow for additional cameras around the campus. Lastly, a request has been made for an easier way for students and guests to access the wireless network. For others to enter the network securely, and to restrict non-priority bandwidth, a wireless system with those features would need to be purchased.

#### 2015-2018 Focus Areas

Seamless technology usage in the classroom is key in a 21<sup>st</sup> century classroom. Over the next three years, HOPE for Hyndman Charter School is committed to moving forward with our commitment to a technology enriched education for all of our students. To this end, we will use three technology goals to focus our plan:

- Provide Adequate Infrastructure and Equipment
- Enhance Student Academic Achievement
- Enhance Student Technological Competencies

The HHCS Academic and Athletic Excellence Committee has also tasked us with the goal of providing the opportunity for each student in the school to have access to Internet-capable devices at least one period a day.

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#### Goals and Strategies

#### Provide Adequate Infrastructure and Equipment

To address the needs of adequate infrastructure and equipment listed in the needs assessment, HHCS will leverage budgeted funds and grant funds to provide additional Internet capable devices and other hardware to meet the needs of our students. In the 2015-2016 school year, several projects are planned to provide access to our students. These projects are moving the switch and cables from room 114 to the common area, purchasing 25 Internet capable devices for use solely in elementary grades, and purchasing 30 additional desktop computers to be split between our cultural literacy classrooms.

In the 2016-2017 school year, an additional 25 Internet capable devices will be purchased and a new wireless system will be purchased and installed (pending eRate funding).

In the 2017-2018 school year, we will purchase an additional server to create additional administrative and staff storage space.

In each of these school years, remaining technology budget funds will go to updating the security camera system, and grant funds may be used to purchase additional Internet capable devices for student use.

#### Enhance Student Academic Achievement

Through the three years of this technology plan, HHCS will continue budgetary support for the following software products (or suitable replacements) to continue to enhance student learning: iReady, Study Island, and First in Math. Students will continue to use available school resources to support project-based learning.

Students will also have the opportunity to produce curricular projects with current productivity and presentation software provided by the ongoing support for Microsoft and Adobe software site licenses.

HHCS will continue support of online courses for enrichment and credit recovery through budgetary support and under the direction of an eLearning coordinator.

#### Enhance Student Technical Competencies

Students will be provided age-appropriate instruction in digital citizenship, cyberbullying, and all other requirements for the Children's Internet Protection Act (CIPA). HHCS will encourage technical competencies in students by providing opportunities for students to learn productivity and presentation skills in content area classrooms to provide better meaning and context to learning activities.

Throughout the curriculum at HHCS, students will be exposed to the six technology standards as written by the International Society for Technology in Education:

- 1. Creativity and innovation
- 2. Communication and collaboration
- 3. Research and information fluency
- 4. Critical thinking, problem solving, and decision making

- 5. Digital citizenship
- 6. Technology operations and concepts

(see appendix for additional information)

#### Budget

The budget for the technology plan will remain constant throughout the three year span of this plan and will include \$40,000 for lease equipment, \$35,000 for computer software, \$30,000 for technology hardware, support for a full-time chief technology administrator, and support for a part-time eLearning coordinator. Any grant funds secured will be in addition to the general budget items.

#### **Fvaluation**

The facilities and technology committee will evaluate the progress of the technology plan annually. There are three components of this evaluation.

<u>Review of the technology inventory</u>: the hardware, software, and infrastructure inventory will be updated to reflect new purchases and decommissioning of technology.

<u>Evaluation of progress</u>: the progress toward the completion of goals will be documented. Information to support this evaluation will be compiled using inventory logs, yearly survey data, and informal feedback from stakeholders.

<u>Identification of new initiatives</u>: new types of technology will be monitored on an ongoing basis by the chief technology administrator. As new needs or opportunities are identified, additional proposals and acquisitions may be required other than those included in this plan. If such a situation arises, this plan may be updated by the facilities and technology committee.

## Appendix

#### Software Costs

Software Solution	14-15	15-16	16-17	17-18
Microsoft EES	2,850	2,850	3,000*	3,000*
Adobe	1,025	1,025	1,025	1,025*
Google Apps for Ed	0	0	0	0
Avast! Antivirus	0	0	0	0
1and1 Website Host	640	640*	640*	640*
PowerSchool	3,970	4,000*	4,000*	4,000*
School Messenger	2,000	600*	600*	600*
School Stream	6,435	8,565	0	0
Educators Handbook	499	499	499	499
Lunch Time	400	400*	400*	400*
Snap Health	1,799	1,799*	1,799*	1,799*
IEP Writer	1,469	1,500*	1,500*	1,500*
iReady	0	22,000*	0	22,000*
Study Island	1,552	1,600*	1,600*	1,600*
Aventa/Online Providers	5,650	6,000*	6,000*	6,000*
Palo Alto (filtering)	945	1,000*	1,000*	1,000*
Totals	29,234	46,478	22,063	44,063

<sup>\*</sup>Estimated

## Network/Communications Equipment

Network Solution	Brand	Model	Year Purchased	l Quantity
Router/Firewall/Filter	Palo Alto	PA-200	2013	1
Network Switch	Netgear	GSM7252PS	2012	3
Network Switch	Netgear	GS748T	2011	2
Wireless Controller	Netgear	WC7520	2012	1
Wireless Access Point	Netgear	WNDAP360	2012	15
Phone System	NEC	DSX-160	2011	1
Phone Handsets	NEC	DSX-22B	2011	45
Network Storage	Netgear	ReadyNAS	2012	1
Security Camera Recorder	Everfocus	ECOR264	2011	1
Security Cameras	Varied	Varied	2011	16

#### Hardware

Network Solution	Brand	Model	Year Purchased	Quantity
Server	Lenovo	ThinkServer	2012	1
Server	Dell	PowerEdge 2900	2011	1
Server	Dell	PowerEdge 2600	N/A	1
Laptop	HP	ProBook 4540s	2013	45
Laptop	Lenovo	ThinkPad Edge	2011	30
Laptop	Lenovo	Idea Pad	2012	4
Laptop	Mac	MacBook	N/A	16
Desktop	Lenovo	ThinkStation E31	2012	5
Desktop	Lenovo	ThinkCenter	2012	2
Desktop	Nexlink	DH61BF	2013	30
Copier/Printer	Cannon	C5250	2014	1
Copier/Printer	Cannon	6255	2014	1
Copier/Printer	Cannon	4235	2014	1
Copier/Printer	Cannon	3245	2011	1
Printer	HP	OfficeJet 4500	2011	2
Printer	HP	LaserJet 1320n	N/A	1
Printer	HP	LaserJet 400MFP	2013	1
Printer	HP	LaserJet m401n	2014	1
Printer	Ricoh	Aficio 4100n	N/A	2
Projector	Epson	PowerLite 83c	N/A	17
Projector	Infocus	IN114	2011	5

#### ISTE Student Standards 2007



International Society for Technology in Education

# ISTE Standards Students

#### 1. Creativity and innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression
- Use models and simulations to explore complex systems and issues
- d. Identify trends and forecast possibilities

#### 2. Communication and collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

#### 3. Research and information fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry
- Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. Process data and report results

#### Critical thinking, problem solving, and decision making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- Identify and define authentic problems and significant questions for investigation
- Plan and manage activities to develop a solution or complete a project
- Collect and analyze data to identify solutions and/or make informed decisions
- d. Use multiple processes and diverse perspectives to explore alternative solutions

#### 5. Digital citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Advocate and practice safe, legal, and responsible use of information and technology
- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- Demonstrate personal responsibility for lifelong learning
- d. Exhibit leadership for digital citizenship

#### 6. Technology operations and concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

- a. Understand and use technology systems
- Select and use applications effectively and productively
- c. Troubleshoot systems and applications
- d. Transfer current knowledge to learning of new technologies

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## Document Change Log

Version	Date	Description
1.0	3/26/2015	Initial Board Approval of Document