WAY Academy Detroit
Technology Plan
2012-2015

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Tech Plan URL	**http://www.wayacademy.net/board**

TABLE OF CONTENTS

School Mission Statement

Delivering a blended global learning model to encourage positive self-esteem, academic excellence, and life-long learning for young people in Detroit.

Introduction

WAY Academy Detroit was founded in 2012 to offer high school students in Detroit a new way of learning. It is a blended model consisting of both online and on-site education in student-centered, project-based, standards-focused environments. The online instructional program is modeled after the successful statewide WAY Program, which has been operating in Michigan since 2009 maintaining an 85% retention rate. The WAY Program, in turn, is based on the UK's NotSchool, which boasts a 98% success rate for its students over the past 10 years.

WAY Academy Detroit serves 500 young people aged 15-19 in a single facility in downtown Detroit. Nearly 80% of the school's students are eligible for free or reduced lunch, and 34.5% of families in the city live below the poverty level according to the 2010 U.S. Census.

The school has 85 employees, including 50 mentors (1 mentor for every 10 young people) and 25 content area instructional experts (aka teachers, 1 expert for every 20 young people).

Vision

WAY Academy Detroit offers an alternative approach to education; one that encourages self-esteem, independence, and the development of 21st century skills that facilitate a college education and subsequent career paths for each young person. Students at WAY Academy Detroit will become researchers on track to receive a high school diploma, as well as college credit with an option to pursue an associate's degree prior to graduation. Each student is provided with a customized, standards-based learning plan and paired with a mentor to coach them toward graduation. Each student is equipped with a desktop computer with Internet connectivity for personalized access.

WAY Academy Detroit combines a blended model of personalized, project-based learning with both online and face-to-face interaction. School staff are invested in the success of each student, providing online support 7 days a week, 24 hours a day, all year round. This dedication allows students to excel at their own pace, developing customized learning plans on topics that truly appeal to them.

Students will use their personal device and installed applications, such as word processing, spreadsheet, presentation, and multimedia authoring, to conduct research on their projects and create learning artifacts that document their learning. Their

technology is also used to access the online learning environment for interactions with their peers, online mentor, and content area experts. They also access the online reporting system that tracks their attainment of content standards and credits on the path to earning both their high school diploma and college credits.

The on-site environment, known as the "Learning Lab," includes iMac workstations complete with applications for productivity, video editing, 3D modeling, GIS, CAD, and other resources to allow researchers to pursue projects in-depth according to their individualized graduation plans. Projectors, video conferencing equipment, specialized computers, printers, and other multimedia elements are also available in key areas throughout the school.

Goals

Technology is a core component of all instructional strategies at WAY Academy Detroit. Students will use technology to research driving questions, create artifacts to demonstrate their learning, and collaborate with peers and instructional staff. The program is structured to facilitate the mastery of 21st Century survival skills, as identified by Dr. Tony Wagner in "The Global Achievement Gap." At the same time, students will be mastering Michigan High School Content Expectations (HSCEs) and Common Core State Standards (CCSS) across all curriculum areas.

Students are required to log in to the online learning environment on a daily basis, seven days a week. At a minimum, they will email their online mentor to report on their learning activities each day. Fully realizing the benefits of the learning environment include accessing existing project ideas that are aligned to HSCEs and CCSS, reviewing their individualized learning plans and earned standards to guide the selection of new projects, interacting with content experts across multiple content areas to design new projects meeting needed standards, and accessing resources and support to assist with challenging concepts.

The following belief statements guide the use of technology at WAY Academy Detroit:

- Technology will be used daily as a key learning strategy
- Technology will facilitate the personalization of learning by enabling each student to access the tools and resources he or she needs, anywhere, any time
- Students and staff will effectively use technology by selecting the appropriate resources (hardware, software, Internet resources, colleagues) for each task
- Technology will support the real-time tracking of student progress and make that information available to students, parents, teachers, and administration

Specific goals of the 2012-2015 technology plan include:

- Acquire and deploy all necessary technology devices for students, staff, and the Learning Lab
- Acquire and deploy all necessary infrastructure to support full roaming wireless access in the Learning Lab
- Deploy enhanced technology resources within the the Learning Lab
- Demonstrate that all students exceed the Michigan Merit Curriculum “online learning experience” high school graduation requirement

Curriculum Integration

The core of academic progress at WAY Academy Detroit is mastery of the Michigan High School Content Expectations (HSCEs) and the Common Core State Standards (CCSS) across all content areas. Students earn credit by demonstrating mastery of a minimum of 70% of the standards required for each content area equating to one credit earned in that area. There are currently more than 2,200 total standards across all HSCE/CCSS areas when considering academic core content areas plus available electives. A total of 22 credits is required for graduation from WAY Academy Detroit - 17 credits as defined by the Michigan Merit Curriculum plus 5 elective credits. One elective must be a credit in Information & Communication Technology (ICT).

Each student’s progress toward credit attainment is measured and documented daily within the web-based reporting system, known as DRIVE. Each student and their parents can view their running total of standards completed, the corresponding amount of credit earn by completing those standards, and a transcript denoting current letter grade based on quarter credits attained and proficiency levels of awarded standards.

The method used for demonstrating mastery is through technology - conducting research, documenting learning through the creation of learning artifacts, and accessing the online learning environment and the reporting system. Therefore, technology skills are developed organically by earning credit. In addition to the content standards, students at WAY Academy Detroit will demonstrate mastery of ISTE’s NETS standards:

ISTE NETS Technology Foundation Standards for Students

1. Creativity and Innovation

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

a. apply existing knowledge to generate new ideas, products, or processes.
b. create original works as a means of personal or group expression.
c. 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. Students:

a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
c. 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. Students:

a. plan strategies to guide inquiry.
b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
d. process data and report results.

4. 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. Students:

a. identify and define authentic problems and significant questions for investigation.
b. plan and manage activities to develop a solution or complete a project.
c. 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. Students:

a. advocate and practice safe, legal, and responsible use of information and technology.
b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
c. 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. Students:

a. understand and use technology systems.
b. select and use applications effectively and productively.
c. troubleshoot systems and applications.
d. transfer current knowledge to learning of new technologies.

The ISTE NETS correlate well with Tony Wagner's Seven Survival Skills that guide the philosophy of WAY Academy Detroit:

Wagner's Seven Survival Skills for the 21st Century

1. **Critical Thinking & Problem Solving**

2. **Collaborating Across Networks & Leading By Influence**

3. **Agility & Adaptability**
4. **Initiative & Entrepreneurialism**
5. **Oral & Written Communication**
6. **Accessing & Analyzing**
7. **Curiosity & Imagination**

Student Achievement

The curriculum at WAY Academy Detroit will be delivered through blended online and face-to-face project-based learning formats that encompass the Common Core State Standards (CCSS) as well as the Michigan High School Content Expectations for grades 9-12. Projects will be cross curricular in nature and designed to compliment real world application. Additionally, projects will be designed to adapt to individual student interests and academic needs. In project-based learning, students go through an extended process of inquiry in response to a complex question, problem, or challenge. In many instances, students can use what they have learned to give back to the community.

Projects help students learn key academic content and practice 21st Century (Global) Skills such as collaboration, communication, critical thinking, and creative innovation. Research has shown that students benefit from project-based learning and have outscored their peers in control groups who receive more typical textbook and lecture drive approaches. Students also score higher on measures of problem-solving skills and application to real-world challenges through the use of project-based learning.

Technology is the core of the instructional process at WAY Academy Detroit, because students will use the online learning environment to select ready-made projects or to co-develop projects around their interests in conjunction with content experts, create their learning artifacts using their personal device, submit their work online, and track their progress using the DRIVE reporting system. Learning artifacts will be everything from email threads with experts documenting the discussion and student understanding of challenging concepts to documents, spreadsheets, and presentations to student created music, videos, websites, and three dimensional models to photographic and video documentation with corresponding journaling and reflection. Activities are as varied as changing the oil in a car to giving a presentation to City Council to teaching viewers how to perform skateboard maneuvers.

The student's iMac desktop computer, software, and Internet connectivity will be the key to collecting and reporting evidence of student learning. Staff will evaluate this work against the CCSS and HSCEs and provide feedback through both the online learning environment and using DRIVE. Staff also create engaging project opportunities for

students that include documents, spreadsheets, presentations, video, audio, and Internet resources.

Students and staff will have access to discussion boards, email, and instant messaging as communication tools within the online learning environment, and may also communicate with peers and teachers using videoconferencing via Skype, Face Time, or other upcoming web collaboration tools. Technology IS the instructional process at WAY Academy Detroit.

Curriculum Integration Timeline	2012-13	2013-14	2014-15	Notes
Online learning environment initial deployment	X			Purchase & deploy server hardware and software
Online environment available	X	X	X	Exceeds MMC "online learning experience"
100% student device deployment	X	X	X	Student iMacs, internet
100% staff device deployment	X	X	X	MacBook/MacBook Pro
Learning Lab technology deployment	X	X	X	iMac/MacBook Pro/ multimedia devices/ etc.
Infrastructure initial deployment	X			Wireless, electrical, etc.
Technology integrated within curriculum	X	X	X	Curriculum is technology driven

Technology Delivery

Access to the online learning environment and to DRIVE is available via the Internet 24/7/365 with staff scheduled to be online and available to support students at all times. Each student will be provided a desktop computer with internet connectivity and school-paid Internet access to support anytime, anywhere learning. Students will have appropriate access to Internet resources to conduct their research, including tools such as the Michigan eLibrary (MeL), streaming video resources (specific sources are being

evaluated), content from NetTrekker and Atomic Learning, and more. Research on effective online collaboration tools such as Adobe Connect and WebEx is underway to support students who are facing difficulties attending their Learning Lab time, and to increase access to staff support outside of the regular school day.

Parental Communication & Community Relations

The technology plan, and specifically the intrinsic connection between technology and the delivery of curriculum, will be discussed with all parents upon their students' enrollment into the school. Because the project-based nature of the instruction and the technology supports required to implement it are so different from traditional high school models, a key success factor in gaining parental support for their students' success will be in their understanding the importance of technology and how it will be used. The full state-approved technology plan will be available on the school's website as well.

Communication with parents will also be supported by technology, as all parents will have access to review their students' progress in real time through the DRIVE reporting system. There will be several orientation sessions to demonstrate the information available to students and parents through DRIVE, and staff will be available to provide guidance to anyone unable to attend those sessions. All staff will have email addresses that will be shared with parents to support additional communication.

Parents will be recruited and invited to participate in the ongoing development of this technology plan, as it is viewed as a living document. A Technology Advisory Committee (TAC) for the school that will include parent and student representatives is planned to evaluate the effectiveness of current technology deployments (e.g., is a desktop machine too cumbersome? Is file storage space sufficient?) and to plan for evaluation of emerging technologies. Student and parent voice in the tools made available for learning is part of the culture of the school. The group will meet monthly, and will determine ways to collect input and requests from all school stakeholders, as well as means of disseminating results using online resources.

Collaboration with Adult Ed Programs

WAY Academy Detroit is a high school diploma-granting charter school and is therefore not directly involved in Adult Education or GED programs at this time. However, the program will evaluate the needs of the community and will re-evaluate that need on an annual basis.

English as a Second Language (ESL) instruction for students enrolled at school will be addressed by hiring or contracting with staff fluent in those students' home languages based upon need.

Professional Development

All staff - teachers, administrators, and support staff - will take part in at least three days of initial immersive training designed to impart the program ethos, orient staff in effective and supportive online communication, provide instruction in project-based learning, and to explore the online learning environment. Skill development is included inherently through guided activities during training. Because the delivery of the curriculum is technology-driven, professional development activities by necessity will focus on technology integration.

Teachers undergo an additional month of focused coaching by established experts with extensive online and project-based experience. Additional ongoing support is provided within the learning environment through Professional Learning Communities. Finally, staff will participate in monthly professional development sessions scheduled outside instructional time to support 100% participation. All staff will exceed the ISTE NETS standards appropriate to their job.

ISTE NETS Technology Foundation Standards for Teachers

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

1. **Facilitate and Inspire Student Learning and Creativity**
   Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:
   a. promote, support, and model creative and innovative thinking and inventiveness
   b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
   c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
   d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. **Design and Develop Digital-Age Learning Experiences and Assessments**
   Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. Model Digital-Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

a. participate in local and global learning communities to explore creative applications of technology to improve student learning
b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

ISTE NETS Technology Foundation Standards for Administration

1. Visionary Leadership.
Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization. Educational Administrators:
a. inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders
b. engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
c. advocate on local, state, and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan

2. Digital-Age Learning Culture. Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students. Educational Administrators:
a. ensure instructional innovation focused on continuous improvement of digital-age learning
b. model and promote the frequent and effective use of technology for learning
c. provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners
d. ensure effective practice in the study of technology and its infusion across the curriculum
e. promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration

3. Excellence in Professional Practice. Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources. Educational Administrators:

a. allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration
b. facilitate and participate in learning communities that stimulate, nurture, and support administrators, faculty, and staff in the study and use of technology
c. promote and model effective communication and collaboration among stakeholders using digital-age tools
d. stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning

4. Systemic Improvement. Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources. Educational Administrators:
a. lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources
b. collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning
c. recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals
d. establish and leverage strategic partnerships to support systemic improvement, establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning

5. Digital Citizenship. Educational Administrators model and facilitate understanding of social, ethical, and legal issues and responsibilities related to an evolving digital culture. Educational Administrators:
a. ensure equitable access to appropriate digital tools and resources to meet the needs of all learners
b. promote, model, and establish policies for safe, legal, and ethical use of digital information and technology
c. promote and model responsible social interactions related to the use of technology and information
d. model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools

Professional Development Timeline	2012-13	2013-14	2014-15	Notes
Initial training for new staff	Yes	As needed	As needed	New staff receive training prior to starting their position

Professional Development Timeline	2012-13	2013-14	2014-15	Notes
Teacher coaching	Yes	As needed	As needed	
Online PLC	Yes	Yes	Yes	Collaboration through discussion and sharing of resources
Monthly PD sessions	Yes	Yes	Yes	

Supporting Resources

There are many resources available to the school to support the technology program, including:

- Technical support staff
- Partnership with WAY Program
- Online learning environment for instruction and support
- Web-based reporting tool
- School website
- Strategic partners including Apple, Merit Network, and State of Michigan Library
- Michigan eLibrary (MeL) and Michigan Online Resources for Educators (MORE) Portal
- Atomic Learning
- NetTrekker

Infrastructure

WAY Academy Detroit was founded in 2012 with most of the initial technology purchases coming right at the start of this technology plan.

General Infrastructure

- Building Internet access: Internet access of at least 50 Mbps to support significant access to the online learning environment, reporting system, and Internet resources is required. Initially, access via 10 Mbps cable modem will be implemented to reduce startup costs. Alternative options will be evaluated yearly, and bandwidth increased each year to accommodate growth. This is an ongoing need and will be continued within the timeframe of this tech plan. This item is E-Rate eligible and the school intends to apply.

- Firewall: A hardware based firewall to segregate internal communications from general Internet access, and to protect from intrusion and unauthorized access. The school will open without a dedicated hardware firewall in place, and rely upon software firewalls on individual machines, until E-Rate funds can be secured. This item is E-Rate eligible and the school intends to apply.

- Content filter: To comply with CIPA, the school will implement a content filtering system and has implemented Internet safety policies to address inappropriate content, safe electronic communication, understanding of appropriate behaviors including not accessing unauthorized systems, and keeping personal information safe. Content filtering will be put in place during the summer prior to the start of school. Content filtering, although required to be eligible for E-Rate funding, is not in itself E-Rate eligible.

- Phone system: The school will purchase a central telephone and voice mail system to support parental, community, and emergency services communications. Cell phones will be used until E-Rate funding can secure the eligible portions of the system. The central phone system and voicemail system are E-Rate eligible and the school intends to apply. Handsets are not E-Rate eligible.

- Phone service: Local and long distance dial service will be purchased to connect the phone system to the outside world. This item is E-Rate eligible and the school intends to apply.

- Wireless access points: Several access points will be deployed throughout the Learning Lab to provide wireless coverage within the building, and will be scalable to accommodate growth. These items will be installed during the summer prior to the start of school, and as need to accommodate growth.

- Cabling & Electronics: Several devices such as specialized iMac workstations, printers, wireless access points, and video conferencing equipment will be direct connected to dedicated cabling to create an internal Local Area Network (LAN). Telephones will also require hard wired connections. Therefore, internal cabling and wall jacks will be installed in the learning spaces, as well as network switches, will be installed. Some wiring will be completed during the summer prior to the start of school and some will be completed after E-Rate funding has been secured. These items are E-Rate eligible and the school intends to apply.

- File server/device management server: Offsite server hardware and software to manage devices, deploy apps, and for user file storage. This item will be installed during the summer prior to the start of school. Not E-Rate eligible.

End User equipment - Not E-Rate eligible.

- Student desktop computers: Every student will be provided with a desktop computer and internet connectivity to allow for access anywhere. These items will be purchased during the summer prior to the start of school, and as needed to accommodate new enrollment.

- Staff laptops: Staff will be provided with 13" MacBook Pro or 11" MacBook Air laptops. These items will be purchased during the summer prior to the start of school, and as needed to accommodate additional staff due to increased enrollment.

- Learning Lab iMacs: Each Learning Lab will start with a minimum 20 iMac workstations. These items will be purchased during the summer prior to the start of school, and as needed to accommodate new enrollment.

- User handsets: The Learning Lab will be provided with two multi-line telephones each, while each office will also be equipped with a phone. Will be purchased as part of the phone system, though handsets are not E-Rate eligible.

Learning Lab enhancements - Not E-Rate eligible unless noted.

- Printers: Each Learning Lab will be provided with a low cost, shared printer. These items will be installed during the summer prior to the start of school.

- 3D printer: One high-end 3D printer will be available within the school to support 3D modeling projects. This item will be purchased during the summer prior to the second year of school.

- Interactive projectors: Projectors and large-screen monitors will permit group instruction and presentations. The projectors selected will include interactive technology to allow users to control the connected computer from the display. These items will be installed during the summer prior to the second year of school.

- Video Conferencing equipment: The school will purchase interactive video equipment to support distance learning activities. Will be purchased once E-Rate funds become available. This item is E-Rate eligible and the school intends to apply.

- Video cameras: Recording devices to capture high quality video for more in-depth video work than can be captured by the camera included in each iMac workstation or student desktop computer. These items will be purchased during the summer prior to the start of school.

Student access

- Internet connectivity: Every student's desktop computer will come with internet connectivity to allow for access to the learning environment and reporting system outside of school, since they are required to log in daily including weekends and holidays. This is an ongoing need and will be continued within the timeframe of this tech plan. E-Rate has a pilot program underway to evaluate the provision of personal Internet access, and the school intends to apply when it becomes available.

Technology Interoperability and Timeline

All equipment will be new and based on industry standards to ensure maximum interoperability. Apple has been selected as the primary equipment provider and strategic partner, therefore compatibility with Apple hardware, software and operating systems will be guiding principles for all selected hardware.

Technology Acquisition Timeline	2012 -13	2013 -14	2014 -15	Notes
Internet access	X	X	X	Evaluate bandwidth use annually and adjust as necessary
Firewall		X		Expect minimum 4 year life cycle
Content filter	X	X	X	Annual subscription, re-evaluate market every 4th year
Phone system		X		Expect minimum 7 year life cycle
Phone service		X	X	Re-bid dialtone & long distance pricing every 3 years
Wireless access points	X			Will purchase Apple Airport Extreme devices to ensure maximum interoperability. Expect minimum 5 year life cycle
Cabling	X	X		Category 6 cabling for all wiring, expect minimum 10 year life cycle
Network electronics		X		Expect minimum 4 year life cycle
File server	X	X	X	Evaluate memory & disk space annually, along with annual device management software subscription

Technology Acquisition Timeline	2012 -13	2013 -14	2014 -15	Notes
Student desktop computers	X	X	X	Protection plans and damage insurance will be purchased and spares will be included to ensure student work can continue in event of damage. Expect minimum 4 year life cycle. New students = new purchases
Staff laptops	X			AppleCare Protection Plan will be purchased and spares will be included to ensure staff work can continue. Expect minimum 5 year life cycle.
Learning Lab iMacs	X			AppleCare Protection Plan will be purchased. Expect minimum 5 year life cycle.
Phone handsets		X		Expect minimum 8 year life cycle
Printers	X		X	Low cost devices, expect 2 year life cycle
3D printer	X			High end device, communicates over industry standard IP protocol. Will include annual maintenance agreement
Interactive projectors	X		X	Expect minimum 6 year life cycle for projector, budget to replace bulbs every 2 years
Presentation monitors	X		X	Expect minimum 6 year life cycle
Video conferencing equipment		X		Expect minimum 5 year life cycle, will be H.323 (IP based) to ensure interoperability
Video cameras	X			Expect minimum 5 year life cycle
Student internet service	X	X	X	Monthly expense per student

The school will staff one full time technology support specialist, will have access to additional tech support through its partnership with its education provider WAY Program

and will purchase manufacturer support on all hardware. For all Apple devices, this effectively creates an available technical support network of all Apple Stores directly to each individual user. Support levels and incident response times will be evaluated and reported upon monthly by the tech support specialist who will report to the Assistant Director and the Director of the school.

Increased Access

All students and staff will be provided with their own desktop computer and shared Internet access while in school. All students will have home Internet access provided by the school either installed as a landline (via cable modem) in their home or cellular wireless (3G) device where landlines installation is not possible. Any assistive technologies that may be required for individual students will be provided as needed. As identified in the mission and vision, access to technology is a fundamental part of WAY Academy Detroit and the school will provide 100% access from its inception.

Budget and Timetable

Acquisition timelines are identified in a previous section - most equipment will be acquired during the 2012-13 school year in order to support school startup, while some purchases will be deferred until E-Rate funding can be secured.

2012-2013 Budget

The 2012-13 budget includes initial equipment acquisition and first year of recurring costs. Because the school did not exist during the E-Rate filing windows for the 2012-13 school year, there are no discounts considered for the first year. Funding for the Year 1 budget is provided initially by the charter granting authority's startup fund allocation, and recurring costs are covered by the school's per-pupil state aid funding through the general operating fund. This budget is based upon enrollment of 500 students, as Internet Access and Student Desktop Computers are provided one per pupil.

Item	Budget
Tech salary	$30,000
Internet Access (school)	$1,500
Internet Access (student)	$150,000
Content Filter - 1st year	$3,000

Wireless Access Points	$800
Phone Access	$7,500
Cabling	$3,000
Network Electronics	$500
File Server	$5,000
Student desktop computers	$500,000
Staff laptops	$102,000
Multimedia iMacs	$240,000
Printers and accessories	$1,000
3D Printer	$4,000
Interactive projectors	$1,600
Large screen monitor	$1,200
Video cameras	$6,000
Year 1 Tech Budget	**$1,057,100**

2013-14 Budget

The second year of the tech plan includes additional acquisition costs, as well as recurring and maintenance costs. E-Rate funding will also be available beginning this year, and the school anticipates a 90% discount based on population demographics in the neighborhood. The school's funding for non-eligible equipment and services will come from per-pupil state aid through the general operating fund. Note the second-year student equipment cost is only for newly enrolled students for 2012-14 which will require the purchase of desktop computers.

Item	Budget	E-Rate Discount	School Cost
Tech salary	$30,000	$0	$30,000
Internet Access (school)	$2,500	$2,250	$250
Firewall	$5,000	$4,500	$500
Content Filter - subscription	$2,500	$0	$2,500

Item	Budget	E-Rate Discount	School Cost
Phone system	$7,500	$6,750	$750
Phone system ineligible	$1,500	$0	$1,500
Phone service	$3,000	$2,700	$300
Cabling	$5,000	$4,500	$500
Network Electronics	$1,500	$1,350	$150
File Server upgrade	$1,000	$0	$1,000
Student desktop computers (new enrollment)	$200,000	$0	$200,000
Phone handsets	$8,500	$0	$8,500
Video Conferencing	$20,000	$18,000	$2,000
Student Internet Service	$210,000	$189,000	$21,000
Year 2 Tech Budget	**$498,000**	**$229,050**	**$268,950**

2014-15 Budget

The third year of the tech plan includes primarily recurring and maintenance costs, with scheduled replacement of printers also included. The school's funding for non-eligible equipment and services will come from per-pupil state aid through the general operating fund. Note the third-year student equipment cost is only for newly enrolled students for 2014-15 which will require the purchase of desktop computers.

Item	Budget	E-Rate Discount	School Cost
Tech salary	$30,000	$0	$30,000
Internet Access (school)	$3,500	$3,150	$350
Content Filter - subscription	$2,500	$0	$2,500
Phone service	$7,500	$6,750	$750
File Server upgrade	$1,000	$0	$1,000

Item	Budget	E-Rate Discount	School Cost
Student desktop computers	$200,000	$0	$200,000
Student internet service	$270,000	$243,000	$27,000
Year 3 Tech Budget	**$514,500**	**$252,900**	**$261,600**

Coordination of Resources

Technology costs are significant in the first year of the tech plan due to significant hardware acquisition costs and lack of E-Rate eligibility. Years 2 and 3 are manageable thanks to the length of planned obsolescence schedules and E-Rate funding. WAY Academy Detroit will adhere to E-Rate schedules to maintain funding eligibility and will participate in annual program status updates to keep apprised of program changes. The school also anticipates funding from state sources such as Section 31a (At-Risk) and federal sources such as Title I, Part A and Title II, Part A which can be used to offset portions of technology refreshes in future years, subject to the rules of each of those funding sources. The School's overall financial plan includes annual deposits into a technology refresh fund from the general operating budget. School Administration will also regularly evaluate grant funding opportunities and charitable giving from foundations and community organizations in order to fund additional technology needs.

Evaluation

WAY Academy Detroit is committed to ensuring that its significant investments in technology are effectively enabling the teaching and learning process. A series of evaluation measures will be undertaken on a regular basis to ensure that this is so.

Measure 1 - Students are effective technology users
Description: Because of the nature of instruction at WAY Academy Detroit, students must be proficient users of technology in order to be successful. The No Child Left Behind legislation mandates that all students must demonstrate technology literacy by the end of their 8th grade year, but WAY Academy Detroit provides ample supports to allow students who were not successful in meeting this provision in their previous schooling to quickly gain the needed skills. Support structures from their online mentor and their teachers, including focused instruction within their Learning Lab, along with the immersive nature of the instructional model will ensure that every student quickly gains the technology skills they need.

Measures of success: All students log into the online learning environment daily, participate in online discussions, e-mail threads, and instant messages, and create learning artifacts in a variety of formats. All of these activities are measured by demonstrated progress through earned credit displayed in the online reporting system.

Frequency: Daily

Responsible staff: All staff are responsible for ensuring that each student can effectively use and access the technology they need.
Unmet goals: Any student who needs additional support will receive it, whether they request help in online tech support forums, directly to their online mentor or teachers online via chat, discussion board, or e-mail, or through observation of decreased participation in the environment (missing daily emails, lack of submitted artifacts, limited

progress in attaining credit). Supports include one-on-one instruction both at school and in the home and access to online resources and/or creation of tutorial videos and documents.

Measure 2 - Technology is available to all stakeholders while on-site
Description: Students, teachers, and staff are able to access the online learning environment, the reporting system, and online resources consistently and effectively while in the school building.

Measures of success: Technology help requests are resolved within one day, log files show minimal outages, staff meetings and professional development sessions include feature enhancement and additional skill development over issue resolution when technology is on the agenda, online help request forums do not contain user complaints, users do not raise complaints to administration.

Frequency: Ongoing, with monthly written status reports.

Responsible staff: The technology support specialist will serve as the first response for all technology issues, and will submit his/her monthly status reports to the Assistant Director and Program Director.

Unmet goals: Ongoing technical outages will be addressed on a case-by-case basis and may include working with WAY Program technology staff, contracting with outside support partners and seeking additional technical training for the specialist as needed.

Measure 3 - Technology is available to all stakeholders off-site
Description: Students, teachers, and staff are able to access the online learning environment, the reporting system, and online resources consistently and effectively while offsite.

Measures of success: Technology help requests are resolved within one day, log files show minimal outages, staff meetings and professional development sessions include feature enhancement and additional skill development over issue resolution when technology is on the agenda online help request forums do not contain user complaints, users do not raise complaints to administration.

Frequency: Ongoing, with monthly written status reports.

Responsible staff: The technology support specialist will serve as the first response for all technology issues, and will submit his/her monthly status reports to the Assistant Director and Program Director.

Unmet goals: Ongoing technical outages will be addressed on a case-by-case basis and may include working with WAY Program technology staff, contracting with outside support partners and seeking additional technical training for the specialist as needed. Coverage/connectivity issues with internet access could include inability for a wired

connection to be installed in the student's home whereas a wireless solution will be implemented. User awareness of poor cellular coverage areas and trading equipment to use a different cellular network will further address the issue if necessary.

Measure 4 - Completion of "online learning experience" graduation requirement
Description: All students will demonstrate completion of this graduation requirement within the Michigan Merit Curriculum, specifically at least 20 hours of an "online learning experience."

Measures of success: By nature, graduating from WAY Academy Detroit will far exceed the required amount of time online.

Frequency: Rolling

Responsible staff: All staff are responsible for ensuring that students successfully complete the program.

Unmet goals: This goal will not be unmet.

Acceptable Use Policy

WAY Academy Detroit has an Acceptable Use Policy (see below) and recognizes federal Children's Internet Protection Act (CIPA) requirements. The School has implemented technology protection measures that serve to block or filter Internet access to pictures that "(a) are obscene, (b) are child pornography, or (c) are harmful to minors, for computers that are accessed by minors." The Acceptable Use Policy addresses "(a) access by minors to inappropriate matter on the Internet; (b) the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; (c) unauthorized access, including so-called "hacking," and other unlawful activities by minors online; (d) unauthorized disclosure, use, and dissemination of personal information regarding minors; and (e) restricting minors' access to materials harmful to them."

Student Name: _____

WAY Academy Detroit Internet Access Agreement:

- I will log on to WAY Academy Detroit learning environment every day, including weekends and holidays, and I will make contact with my mentor.
- I will answer email messages right away.
- If I know that I cannot be in touch for more than a day, I will inform my mentor through email.
- I will work together with my mentor and teachers to plan my projects and agree to a time when they will be completed.
- I will submit a minimum of two (2) projects per week.
- I understand that WAY Academy Detroit operates 365 days of the year, and there is an adult online 24 hours per day.
- I will act responsibly when I use the Internet. I understand that I can use it for both educational and recreational purposes. I will not log on to sites that may cause offense. If I accidentally log on to a site which may cause offense, I will log-off at once and inform my teacher and mentor.
- I understand that there are technology filters in place to help keep me safe, and I will not attempt to disable or get around them.
- I understand WAY Academy Detroit has a secure learning environment. I am able to chat with other members of WAY Academy Detroit community in our secure site. I will not use external chat rooms or areas to contact other WAY Academy Detroit researchers.
- I agree that I will not access outside chat rooms without the consent of my teachers (at school) or parent/guardian (at home). I understand the dangers of accessing external chat rooms.
- I understand WAY Academy Detroit community is a secure, but transparent community. All communications are actively monitored. I will behave respectfully and responsibly when I am in WAY Academy Detroit community.
- I will actively contribute to WAY Academy Detroit learning communities. I will help and support others in the community. If I learn something new, I will share it in WAY Academy Detroit learning environment.

- I will keep my learning environment username and password secure. I will not share it with anyone. I will not let anyone into WAY Academy Detroit learning environment.

- I will look after the equipment WAY Academy Detroit has provided. I agree to return the equipment at any time if asked.

The equipment is as follows:

* iPad : Serial Number _____

I understand that the equipment is the property of WAY Academy Detroit until the requirements listed below have been met.

***Enrollment in the WAY Academy Detroit for one or more calendar years.**

AND

***Fulfill WAY Academy Detroit graduation requirements.**

Print Name: _____

Signature: _____

Date: _____

Signed of behalf of **WAY Academy Detroit:**

_____