Technology Plan

Prepared for: Manchester Academy Students/Patrons

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4 year technology plan: 2014-2018

EXECUTIVE SUMMARY

Objective

Academics have always been a very important aspect of Manchester Academy, and academics are still at the forefront of the current strategic plan. The MA leadership believes that students need the core foundation of knowledge that has been taught at MA since its inception as well as skills that will prepare them for 21st Century citizenship. These skills include creativity, critical thinking, problem solving, communication, and collaboration. While these skills are not new, they are in ever-increasing demand in a world that is more digital and more globally connected. Technology has evolved into a tool for fostering these 21st century skills.

Goals

Manchester Academy is committed to the use of technology in the academic program as a tool to expand learning opportunities. MA provides network access for students, faculty, staff, and administration. Our goal is to promote educational excellence by sharing, communication, collaboration, and innovation. All network access is expected to support education consistent with the mission statement of Manchester Academy.

The transformation will take several years to accomplish. A more student-centered learning environment will supplement the strength of the MA faculty. Teachers will mix traditional teaching methods with project- and inquiry-based learning. This mix will allow teachers to work more closely with students on an individual and small-group basis. It will enable learning to take place outside the classroom as well as in it.

Our goals include the following:

- Promote student centered learning environments
- Promote and foster 21st century learning skills
- Improve communication and collaboration with teachers and students
- Facilitate and inspire student learning and creativity
- Promote digital citizenship and responsibility

Solution

To implement our goals, we are establishing a 1:1 technology initiative. We have partnered with Apple, Inc. to create this digital learning environment. Devices will be issued to students in grades10-12 for the beginning of the 2015-2016 school year. Students in grades 2K-3 grades will work with IPads on a cart at school, while students in grades 4- 9 will work with MacBook Air computers provided on a cart at school.

Project Outline

Year 1: School Year 2015-2016

Beginning in August 2015, MA students in grades 10-12 will benefit from the first phase of Manchester Academy 1:1 initiative. Students in grades 10-12 will receive MacBook Air laptop computers. These high school students will be issued laptops to use until graduation within the Laptop Users Agreement and Acceptable Use Agreement and Laptop Care Guide. Students will use the IWorks applications that are included with the laptops. IWorks applications are Pages (word processing application), Keynote (presentation application), and Numbers (spreadsheet and table/chart application).

One IPad cart will be provided for the elementary students. Teachers in grades 5K-3 will begin to use IPads inside the classroom. In addition, one cart of MacBook Airs will be serviced in the elementary library for use of elementary computer classes. A cart of MacBook Airs that is currently in use will remain available for teachers in grades 4-9 to use within the classroom. Desktop computers in the elementary computer lab will no longer be available for computer activity. Elementary computer lab will continue for this school year with the MacBook Air cart . Elementary students will be offered keyboarding beginning in grade 4 and continue through grade 6 meeting academic standards approved by the administration. To prepare for the upcoming school year, 6 grade students should be able to type up to 30 gross words per minute (gwam) with 90%-100% accuracy. Accelerated Reader will continue to be centered in the library. Elementary students will use the laptops provided in the library centered cart. ELS will continue to use the computers currently used within the lab.

Keyboarding (7th grade) and computer applications (8th grade & 11th grade) with the desktops in the secondary computer lab will also be offered this school year. Computer applications will continue this year with Microsoft Office software.

Teachers will continue with professional development in the use of computers and IPads within the classroom. Apple workshops will also be provided for teachers to improve skills with the IWorks applications along with other applications such as IMovie, IPhoto, and Garageband.   It will be necessary for new teachers employed by Manchester Academy to be included in the professional

development in order for students to have consistent use of technology for their learning purposes. This goal will be achieved by visiting schools which have experience with technology.

Year 2: School Year 2016-2017

School year 2016-2017 will extend Manchester Academy 1:1 initiative will expand to grades 7-12. Students in grades 10-12 will continue with the MacBook Airs from the previous year and students in grades 7-9 will be issued MacBook Airs in addition. All secondary students will be issued laptops to use until graduation within the Laptop Users Agreement and Acceptable Use Agreement and Laptop Care Guide. Students will use the IWorks applications that are included with the laptops. IWorks applications are Pages (word processing application), Keynote (presentation application), and Numbers (spreadsheet and table/chart application).

Elementary teachers will continue to use IPads on the cart checking out as needed for classroom use. The elementary computer lab will continue to teach keyboarding in grades 4-6 with MacBook Airs provide in the cart located in the library. The goal of elementary keyboarding is to complete keyboarding skills with 6 grade students typing 30 gwam with 90%-100% accuracy. Accelerated Reader will continue to be centered in the library. Elementary students will use the laptops provided in the library centered cart. Research will begin for the use of IPads for Accelerated tests.

If needed, the ELS lab may replace the computers currently used within the lab with the desktops that will be removed from the secondary lab which are newer. ELS will explore the possibilities of upgrading using IPads and the MacBooks Airs that all elementary students will be using by the end of this plan.

The secondary lab with desktops will be discontinued. Seventh grade keyboarding will no longer be offered. New students who have not had keyboarding must take a 3 week keyboarding course to get skills to effectively use the computer keyboard. Secondary computer classes will continue through the secondary with computer programming and/or computer coding.

Teachers will continue with professional development in the use of computers and IPads within the classroom. This goal will be achieved by visiting schools which have experience with technology. Apple workshops will also be provided for teachers to improve skills with the IWorks applications along with other applications such as IMovie, IPhoto, and Garageband. It will be necessary for new teachers employed by Manchester Academy be included in the professional development in order for students to have consistent use of technology for their learning purposes.This goal will be achieved by visiting schools which have experience with technology.

<u>**Year 3: School Year 2017-2018**</u>
The third year of the technology plan will include grade 5-12 participating in MA's 1:1 computer initiative. All students in grades 5-12 will receive MacBook Air laptop computers. This year (2017-2018) will complete Manchester Academy's plan for students 5-12 phase of technology. These students will be issued laptops to use until graduation within the Laptop Users Agreement and Acceptable Use Agreement and Laptop Care Guide. Students will use the IWorks applications that are included with the laptops. IWorks applications are Pages (word processing application), Keynote (presentation application), and Numbers (spreadsheet and table/chart). Using these applications along with other apps provided on the computer, teachers will be able to fully incorporate computer based projects that will meet the goals of this initiative.

Elementary teachers will continue to use IPads on the cart checking out as needed for classroom use. The elementary computer lab will continue to teach keyboarding in grades 4-6 with MacBook Airs. The goal of elementary keyboarding is complete keyboarding skills with 6th grade students typing 30 gwam with 90%-100% accuracy. Accelerated Reader tests will now be taken within the classroom. Elementary students will use the laptops provided in the library centered cart. ELS will continued depending on the ability of the programs to use IPads and/or MacBook Airs.

Secondary computer classes will continue through the secondary with computer programming and/or computer coding.
Teachers will continue with professional development in the use of computers and IPads within the classroom. This goal will be achieved by visiting schools which have experience with technology. Apple workshops will also be provided for teachers to improve skills with the IWorks applications along with other applications such as IMovie, IPhoto, and Garageband. It will be necessary for new teachers employed by Manchester Academy be included in the professional development in order for students to have consistent use of technology for their learning purposes. This goal will be achieved by visiting schools which have experience with technology.

<u>**Year 4: School Year 2018-2019**</u>
This school year completes the phases of completing the 1:1 initiative for Manchester Academy. Students in grades 5K-4 will use IPads in the classroom.   The MacBook Air cart located in the library will become part of the technology department for replacement as necessary. But this time, all classrooms will completely incorporate either IPads and laptops into their daily classroom routines. IPads for the elementary will remain at school and will not be taken home by elementary students. Meanwhile, students in grades 5-12 will continue to use the laptops until graduation within the Laptop Users Agreement and Acceptable Use Agreement and Laptop Care Guide. Students will use the IWorks applications that are included with the laptops. IWorks applications are Pages (word

processing application), Keynote (presentation application), and Numbers (spreadsheet and table/chart). Using these applications along with other apps provided on the computer, teachers will be able to fully incorporate computer based projects that will meet the goals of this initiative.

By this fourth year, all elementary and secondary computer policy and classes should be well set within the standards of the curriculum policies of Manchester Academy. ELS will continue as before with student devices if possible.