Mercer Island School District #400
Board of Directors Meeting

January 23, 2014

PARTIAL GOVERNANCE PROCESS MONITORING #1(b)(i)

Technology Update

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BACKGROUND:

Operational Expectation 10 (OE-10) states in part to:

> "…Ensure that all instructional programs, including both content and practice, are regularly monitored, evaluated, assessed and modified as necessary to assure their continuing effectiveness;"

Since the passage of the first technology levy in 2002, the school-based leadership teams and the Learning Services and Technology teams have been working to integrate technology into the 21st Century learning experience of our students. Through numerous partial monitorings of OE-9 and OE-10 and Learning and Technology Services Department updates, the school board has been apprised of those efforts and have provided input and perspective. This report provides a summary of technology to date and proposed plans for the 2014-2015 school year.

1-1 iPAD PROGRAM

The revised work plan from the December 2012 Technology update called for a full implementation of a 1-1 student iPad program for grades 8th through 12th. This required the distribution of nearly 1800 iPads and the associated professional development for staff, student acceptable use training, selection of apps, imaging of iPads and infrastructure upgrades to support this density of equipment.

Operationally, the app selection, imaging and infrastructure upgrades were completed during the spring and summer of 2013. The pilot distribution of iPads occurred during spring 2013, and full distribution of the nearly 1800 iPads to all 8th through 12th grade students was completed September 6, 2013. This deployment would not have been possible without the dedicated support of the operational technology support staff as well as the Technology Teachers on Special Assignment (TOSAs).

Paired with the equipment distribution was professional development that preceded the deployment as well complemented the deployment. Best instructional practices occur when professional development is provided in multiple and differentiated phases. For example,

intensified training in the Spring 2013 around student iPad integration was a large segment of the August (2013) Technology Training Day and professional development is ongoing using the technology integration specialists know as the TOSAs.   The professional development led by TOSAs and teachers, encompasses a wide range of opportunities including but not limited to:

- Nearpod Start to Finish;
- Using iPads for Student Response;
- Video Projects on iPad- Start to Finish;
- Create Instructional Videos with iPads;
- Note taking on iPads;
- Access Flash Websites on iPads; and
- App Exploration and Integration

The 1-1 iPad program has been transformational in the classroom. Teachers have embraced the technology, and are using it with students on a daily basis giving them another tool for personalization and differentiation as well as consistent platform for technology rich lessons. Ready access has allowed teachers and students to:

- investigate topics/facts in real time;
- expand assignments beyond the written text and more importantly with audio and visual components (Pages, iMovie, Office HD, Notability, Show Me, Pic Collage);
- interact with the teacher regarding understanding (Quizlet, Socrative, Nearpod, Chalkboard);
- interact with textbooks and literature books in new ways (iBooks, Overdrive);
- use resources in more accessible ways (Learning Ally, text to speech);
- take notes and organizing assignments (Good Reader, Adobe Reader, Schoology);
- implement the 'flipped classroom' model (Educreations, Schoology);
- access teacher websites and online curriculum resources (Safari, Schoology);
- view and annotate microscopic images (EXO); and
- annotate texts for complex text comprehension (GoodReader, Office HD, iBooks).

The move to a **common platform** has significantly reduced the problems associated with many different types of equipment in a room and the resulting myriad of troubleshooting required.

Support for the iPads is ongoing. Technology specialists work with students and staff daily on operating system and app issues. Devices are managed from a central location, and apps are updated and pushed out to specific classes. Our self-insured program assumed an eight percent damage/loss over the course of the school year. To date, we have repaired or replaced 53 iPads at a rate of 2.9%.

ADDITIONAL TECHNOLOGY INTEGRATION

Beyond the 1-1 implementation in grades 8th through 12th grade, technology integration continues at the elementary and middle school.   Not only are systemic programs ongoing to support learning, there are also pilot programs in place as well as numerous examples of just-in-time technology integration support.

Major technology integration projects, supported by the TOSAs, have included:

- Piloting of additional 1-1 classrooms at 5th grade;
- Implementation of iPads sets in K-2 including Common Core State Standards app support;
- Support of Smarter Balanced field testing preparation;
- Second year implementation of digital citizenship lessons at all grade levels required by Federal law;
- Implementation of 5th grade system wide digital research skills sessions, including reliability and validity;
- Implementation of the Confer app to help personalize learning;
- Student specific anecdotal note keeping in support of Reader's and Writer's workshop;
- Expansion and scaffolding of Word publishing skills in 2nd to 5th grades from simple forms to advanced features;
- Sharing of curriculum maps with tech integration ideas imbedded in cross-curricular units throughout the year;
- Training on advanced management features and report tools in subscriptions including Dreambox and RAZkids; and
- Modeling of best practice introducing iPad small sets and laptop routines and projects.

Technology professional development has been more than 1-1 iPad support and is ongoing as well. Some examples of integration support include:

- Getting the Most Out of Your Elementary Subscription Tools;
- Confer App training – Beginner and Advanced;
- Ready Set Expository Writing: New Research Tools!;
- K-2 iPad implementation, strategic app selection, management, and MORE!;
- 3-5 iPad small sets integration, management strategies, and project ideas
- Teaching Coding to your K-5 classroom; and
- Make your website more interactive to support student learning and parent communication

OPERATIONAL SUPPORT

Beyond the extensive support required for the 1-1 iPad deployment, operational support has been ongoing though the summer and fall of 2013. Network analysis and pilot experience identified necessary upgrades to wireless access points which were subsequently installed. Scheduled equipment (laptops and desktops) upgrades occurred during the summer, and additional equipment was added to support student learning. The district currently supports 1237 laptops, 749 desktops, 2900 iPads, all network and wireless equipment, and district wide software (e.g. Office365, Skyward, Active Directory) with a staff of eight (six are school year only employees).

FUTURE FOCUS

As we look to the coming school year, plans are beginning to take shape for increased 1-1 implementation and other technology integration.

1-1 will be implemented with 6th and 7th grade students in the fall 2015 with possible expansion to other grades when the team has an opportunity to build capacity for the 2016 Capital Levy. While we do not know our exact implementation model for 6th and 7th grade students, we are exploring both take-home as well as in-school options. There are pros and cons to both, and IMS and district staff are currently evaluating student learning impact and implementation support to determine the best structure to successfully bring 1-1 to the remainder of IMS. Teachers are looking forward to having ready access to the technology and our professional development plans for the winter and spring will support increased knowledge for the 7th and 8th grade staff. This rollout will require additional technology support staff.

Additional opportunities will be developed with our K-5 learners, including additional piloting of increased density and 1-1 classrooms, equipment adds where appropriate to support individualization and 21st Century skill development.

Technology Services continually looks beyond the upcoming school year for potential technologies that support learning and integration in a variety of ways. We meet regularly with colleagues across the Puget Sound region to discuss implementation of 1-1 and other technology initiatives to learn from their experiences and update ourselves on 1-1 alternatives (e.g. Surface, Android, Cromebooks, etc.).   Beyond equipment, active research by our staff includes: investigating programming opportunities for students; robotics; electronic curricular materials; and increased collaboration opportunities.

One major goal of the Learning and Technology Services team has always been to create and then support 21st Century learning experiences for all of our students. These experiences are actualizing the 2020 Vision and allowing for more personalization and differentiation for all students in the Mercer Island School District.

RECOMMENDATION

This is a partial monitoring of OE-10 and informational in nature. Board action occurs during the normal monitoring cycle for OE-10, which is planned for June 2014.