TO:             Members, Board of Education
                Dr. Al Roberts, Superintendent

FROM:           Michael Arensdorff, Director of Technology

SUBJECT:        Technology Report for the Board of Education

DATE:           October 21, 2014

Below is a comprehensive update regarding the technology-related projects and activities we have undertaken since the start of the 2014-15 school year. This update includes information about the ongoing roll out of the iLearn 97 initiative, the deployment of supplemental devices, the preparation for the administration of Partnership for Assessment of Readiness for College and Careers (PARCC), communication/outreach to parent/guardians, upgrades to our network, methods for measuring/evaluating our success and our plans for the future. If you have questions, comments or concerns after reviewing this report, please share them with Dr. Roberts. He and I will work together to address them accordingly.

**iLearn 97 Update**
Last month, we deployed 3886 iPad Minis to students in grades three through eight. Below are the dates when children from each grade level received their devices and began/will begin taking them home.

- 8$^{th}$ Grade – Received the devices on September 3 and began taking them home the same day
- 7$^{th}$ Grade – Received the devices on September 4 and began taking them home the same day
- 6$^{th}$ Grade – Received the devices on September 5 and began taking them home the same day
- 5$^{th}$ Grade – Received the devices on September 5 and began taking them home on September 9
- 4$^{th}$ Grade – Received the devices on September 11 and 12 and began taking them home on September 22
- 3$^{rd}$ Grade – Received the devices on September 25 and 26 and will begin taking them home following fall parent-teacher conferences; date will be determined with assistance from the teachers and data and instructional technology coaches

We had originally scheduled the deployment to begin the first week of school. However, it was delayed approximately one week while we resolved several configuration issues that were caused by the workflow design/solutions provided by Apple. We ultimately used this delay to our advantage by spreading out not only when the devices would be deployed, but also when the mandatory boot camp sessions would take place. A number of teachers and parents/guardians told us that the extra time enabled them to further plan how best to use the devices to maximize learning both in and out of the classroom.

In addition to deploying iPad Minis to students in grade three through eight, we gave each first and second grade classroom a tub containing five iPad Minis (380 total) during the last week of September/first week of October. Below is the distribution of the devices broken down by school.

|      | Beye | Hatch | Holmes | Irving | Lincoln | Longfellow | Mann | Whittier |
|------|------|-------|--------|--------|---------|------------|------|----------|
| 1st  | 20   | 15    | 25     | 25     | 30      | 30         | 25   | 20       |
| 2nd  | 20   | 15    | 25     | 25     | 30      | 30         | 25   | 20       |

Our coaches will be working closely and collaboratively with the teachers in these classrooms to identify ways they can use the devices to enhance student learning.

We also, with the help of the buildings and grounds department, provided all 10 of our schools with Chromebooks. The Chromebooks will serve as supplemental devices that can be used for conducting research, practicing keyboarding or taking PARCC/MAP tests. The distribution of the devices, which is broken down by school in the table below, was based on student enrollment and the availability of other equipment in the building.

| Beye | Hatch | Holmes | Irving | Lincoln | Longfellow | Whittier | Mann | Brooks | Julian |
|------|-------|--------|--------|---------|------------|----------|------|--------|--------|
| 20   | 20    | 35     | 30     | 50      | 45         | 20       | 30   | 60     | 60     |

While the deployment of the iPad Minis and Chromebooks was successful overall, the coaches offered feedback about improvements we can make to ensure the success of future rollouts. This feedback included:

- When rolling out an initiative of this size/scope in the future, provide the technology staff with ample time to complete tasks and perform outreach to staff members and parents/guardians.
- Avoid scheduling deployment at the same time as other major activities (e.g., MAP testing).
- More clearly communicate information about resources such as iCloud

and Apple ID.
- Better manage the filtering system so it does not block websites that are being used for instruction.

I have also identified several overall areas for improvement within the technology department, which include:

- Building on the capacity of our technology specialists to further aid in and contribute to the growth and development of our department.
- Proactively sharing positive stories about how technology is being used to support teaching and learning in the classroom.
- Collaborating and communicating with counterparts from peer districts on a regular basis to stay current on topics such as educational technology, security, privacy and best practices.

**Defective, Damaged or Lost/Stolen Devices**
Of the nearly 3900 iPad Minis that have been deployed to students in grades three through eight this year, 17 of them have either been defective, damaged or lost/stolen. Below is a chart that includes a breakdown of the 17 devices by category (defective, damaged or lost/stolen) and the cost incurred for each incident.

|  | Defective | Damaged | Lost/Stolen |
|---|---|---|---|
| # of devices | 7 | 8 | 2/0 |
| Total cost to date | $0 (covered under 1 year manufacture warranty) | $945.40 | $560 |

**Privacy Concerns**
A handful of families contacted us during the first few weeks of school with questions and concerns regarding security and student privacy. We have addressed these questions and concerns by providing information regarding the security and filtering measures we have in place on our network at the school and district levels for keeping children safe while using their devices. These security and filtering measures include SonicWall, OpenDNS, Google SafeSearch and an additional setting on the iPad Minis that restricts access to websites containing adult content. We have shared links to the privacy policies that were created by the companies (Apple, Google, Edmodo, TenMarks, etc.) that supply the various technology-related tools and resources we are using in our classrooms. We have also encouraged our families to contact their Internet service providers about adding filters or restrictions on their home networks.

Our efforts to restrict access to adult content on our network have created some challenges for our teachers. For example, several websites that are used for instructional purposes on a regular basis have been blocked based on the settings of our filters. When these issues occur, our teachers have been instructed to notify us as soon as possible and provide the URLs for the blocked sites. After reviewing the sites to ensure that the content is appropriate, we whitelist them, which makes them available again for immediate use. We will continue to seek ways to filter content that will enable us to support instruction, while also keeping our students safe online.

In addition to the issue of blocked sites, we discovered inconsistencies in our practice of securing parental consent when creating accounts for students (Google, Apple ID, etc.). These inconsistencies not only represented potential violations of privacy law, they left some parents/guardians feeling that the necessary and appropriate steps were not being taken to protect students and their personal information. In response to the concerns raised by these parents/guardians, and in an effort to ensure that our practices are consistent and legally compliant, we have established and implemented a process for effectively managing the issue of consent moving forward. This process includes the use of the enclosed form to make families aware of the programs we use, provide details about the type of information we give to the program providers, and secure consent to set up accounts for their children. To date, less than 10 families have opted out of using some of the programs and requested that their children be given access to alternative resources and/or activities. We have worked with our teachers and coaches to accommodate these requests.

We have also instituted the use of the enclosed app/program request form, which staff members must fill out and submit for approval prior to creating any accounts for students. When the technology team receives a request, we review the privacy and security policies associated with the app/program, as well as assess how the app/program can best be used to support learning. If an app/program receives approval, we work with the staff members to complete the necessary steps (secure parental consent, make sure it functions properly on the network, etc.) for using it in class.

**Professional Development**
During the past two years, there has been a dramatic shift in the way we have administered technology-related professional development both at the school and district levels. This has been highlighted by the substantial increase in the number of staff members who are leading these opportunities in their buildings. For example, teachers from the two middle schools formed a group that is focused on expanding the skill sets of its members and colleagues, and leveraging technological tools and resources to transform teaching practices. This group, which is comprised of 20 to 25 staff members, is taking part in a

year-round professional development program through EdTechTeacher called T21. The members of the group participated in three days of training at the end of 2013-14 school year. During these three days, they developed plans for the middle school boot camps, identified training activities that will take place during this year's Institute Days and participated in the first session of the T21 program. Moving forward, they will participate in two more face-to-face trainings, 12 training modules and two one-hour training webinars in an effort to build on their capacity and establish an effective train the trainer model. Based on the positive feedback we have received thus far, we will continue to seek out additional module and/or training opportunities for the group. We will also determine if we can replicate the group/system at the elementary school level.

In terms of the elementary schools, our coaches have done an exceptional job helping staff with their data and technology needs. We will continue to seek ways to build the capacity of all elementary staff members, while also maximizing the experience and skill of the coaches to help teachers leverage the use of technology.

**Scheduled Maintenance & Upgrade**
During the weekend of October 11, the technology department will be performing scheduled maintenance and upgrades to our network. These upgrades will include switching our WAN network provider from AT&T to Comcast, which will improve service at all 12 district buildings (including the administration building and warehouse) and save approximately $6,500 per month ($78,000 per year) on an annual basis during the next three years. After the three years, we will seek to cut additional costs and further enhance service by architecting our own WAN network.

In addition to the work on the WAN network, we will be increasing our Internet bandwidth speed from 300Mbps to 1000Mbps and moving the hub of these operations from Brooks to the administration building. This will result in the creation of a more efficient and robust network that features better connections, improved delivery of information, and enhanced performance of programs and applications.

**PARCC Update**
In September, I completed the district's readiness assessment for PARCC. This assessment included evaluations of our bandwidth, inventory of devices both with and without keyboards, and wireless access points. Per the table below, our district received 9s across the board for each building, which means we are ready to administer the test from a technology standpoint.

| | School | District | Active/Inactive | Date Updated | Date Submitted | Minimum PARCC Specs — Readiness for Performance Based Assessment (20-day window) (Scoring 0-9) | | | Recommended PARCC Specs — Readiness for Performance Based Assessment (20-day window) (Scoring 0-9) | | | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Tech | Network | Device | Tech | Network | Device | |
| ☐ | Gwendolyn Brooks Middle School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Percy Julian Middle School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | William Beye Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | William Hatch Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Oliver W Holmes Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Irving Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Abraham Lincoln Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Longfellow Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Horace Mann Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |
| ☐ | Whittier Elem School | Oak Park Esd 97 | Active | September 18, 2014 | September 18, 2014 | 9 | 9 | 9 | 9 | 9 | 9 | School Readiness Report ▾ |

Keyboarding proficiency is among the keys to performing well on the PARCC test. Below is a chart that translates typing speed (i.e., words per minute) into the number of pages and time it takes to produce them. This data was gleaned from information for the Common Core State Standards.

| Typing Speed | Time to type 1 page | … 2 pages | … 3 pages |
|---|---|---|---|
| 5 wpm | 50 min | 100 min | 150 min |
| 10 wpm | 25 min | 50 min | 75 min |
| 15 wpm (3rd grade target) | 16.7 min | 33.3 min | 50 min |

Our coaches, with the assistance of the district's directors of curriculum and instruction, are working on the creation of a plan that will help our students develop their keyboarding skills. This plan will include students taking a words per minute assessment prior to parent-teacher conferences so we can identify a baseline for each of them. We will also establish expectations and benchmarks for every grade level (kindergarten through eighth grade). From there, we will continue to gather data so we can measure/assess student growth and inform instructional practices. We will share the details of the plan, as well as stress the importance of keyboarding, with parents/guardians in the coming weeks.

**Parent Education Sessions**
With the help of our coaches and representatives from the PTO Council, we will be organizing monthly technology sessions for our parents/guardians this year. The first session, which will be held at Holmes School on October 28, will feature

a presentation on Internet safety from Ms. Sandra Waters, who is with the Cook County Sheriff's Office Youth Services Programs. We anticipate that District 97 staff will plan and lead most of the remaining sessions. We will provide the community with the schedule of events for the rest of the year as soon as it is finalized.

**Evaluation**
In an effort to evaluate the state of technology in District 97, we plan to survey students, staff members and parents/guardians regarding their viewpoints of iLearn 97 and the overall use of technology district wide.  We will administer this survey twice this year so we can compare the data and determine if opinions change following the ongoing implementation of the 1:1 initiative, the upgrades to the network, etc.

We also plan to have our staff retake the survey they completed last year regarding the integration of technology. Through this survey, we will be able to determine which category (Substitution, Adaptation, Modification, or Redefinition) each person fits into when it comes to leveraging the use of technology in the classroom. We will compare the data from both years to assess growth and measure the effectiveness of our professional development.

**Tri-District Technology Meetings**
During the past nine months, I have been meeting with my counterparts from districts 90 and 200 to discuss a variety of topics, including:

- 1:1 rollouts
- PARCC preparation
- Village-wide Wi-Fi plans (more below)
- Creating redundancy in our networks

These meetings have enabled us to learn from one another and collaborate toward a common goal of providing essential tools that will enhance the learning environment for our students. I will keep you updated on the issues and opportunities we discuss in the months ahead.

**Village-Wide Wi-Fi Plans**
As mentioned above, the technology leaders from districts 97, 90 and 200 have discussed the possibility of making Wi-Fi accessible throughout our villages. With this in mind, the chief information officer for District 200 and I have explored this concept further with representatives from the Village of Oak Park, Park District of Oak Park, Oak Park Public Library and the Oak Park Chamber of Commerce. We are in the infancy stages of a possible plan that would increase Internet access throughout the community. I will keep you updated on the status of these discussions.

**District Technology Plan**

During the next five months, the members of the district's Technology Advisory Committee, along with a group of stakeholders, will be participating in a workshop on October 18 and planning meetings that will lead to the creation of a new three-year technology plan. Among the individuals attending the workshop will be teachers, administrators, staff from the district's technology department, parents/guardians and members of the Technology Advisory Committee. This will be a representative group of individuals in terms of grade levels, departments and types of implementers. The workshop will be led by Alan Randolph, who was the co-chair of the committee that developed the last technology plan and is very experienced in leading these types of visioning sessions.

The feedback and insight collected during the workshop will be used by the Technology Advisory Committee to formulate a plan that is based on specific educational goals. We are scheduled to present this plan to Dr. Roberts in February 2015, and bring our recommendations to the board for review/discussion either later that month or early the following month. I will keep you updated on the status of these efforts.