

Information Memo: Mobile Learning Initiative Outcomes: Measures After Year 2 Implementation

TO: School Board

Superintendent Kocanda

FROM: Maureen Chertow Miller, Director of Technology

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Essential Questions

- How do we monitor the effectiveness of our Mobile Learning Initiative (MLI)?
- How do we continue to improve our use of technology as a learning tool?

Background Information

The Mobile Learning Initiative has just completed Year 2 of implementation. Prior to Year 1, we defined three student learning outcomes for the MLI based on best practice, research and feedback from staff and students. These are the learning outcomes proposed for the Mobile Learning Initiative:

- 1. Students have increased opportunities for self-directed learning experiences.
- 2. Students use technology to effectively initiate and engage in collaborative learning
- 3. Students are savvy, strategic, responsible and balanced users of technology.

The most data-driven measure of the initiative has been our partnership with BrightBytes for the use of their data collection tool. BrightBytes measures data based on the four domains of the CASE Framework: Classroom, Access, Skills, and Environment. CASE is a flexible, research-based framework founded on decades of research, practice, and analysis, used by thousands of schools to improve the impact of technology on learning. The four domains enable BrightBytes' statisticians



and practitioners to prioritize and strategically target opportunities to positively impact learning. Each domain contains between three and eight Success Indicators, areas that the research has shown are linked to student outcomes.

For additional background, refer to June 9, 2015 packet, page 81

Goals for Year 2

After our Year 1 implementation, and looking at our data collected, three major goals were set regarding the Mobile Learning Initiative, a focus on Digital Citizenship, Professional Learning, and the 4C's (Communication, Collaboration, Creativity, Critical Thinking) for students and teachers. Changes reflecting these goals included the following initiatives:

<u>Digital Citizenship Curriculum (Grades 5-8)</u>All students in grades 5-8 participated in a Digital Citizenship kick off presentation. Following the kickoff, each month teachers and students discussed various themes related to Digital Citizenship. All students in grades 7-8 attended an end of year presentation by Assistant Principal Tony Venetico to keep the concepts of internet safety fresh in students' minds prior to departing for the summer.

<u>District Institute Days- Professional Learning Focused on the 4C's</u> For each of our three Institute Days (November, January, and April), half of the day was dedicated to teachers teaching teachers about how to integrate technology into their classrooms. Topics included virtual field trips, Google Apps for Education, and Making Movies.

Measuring our Outcomes - June 2016

In January 2015, predictions were made and goals were set for each indicator prior to the data collection cycle (<u>Click here</u> to view the predictions). After Year 1, data was analyzed and goals were adjusted accordingly. The following sets of data show our 2015 baseline, 2016 end of year, and 2018 goals. As a reminder, BrightBytes uses a five color maturity scale of Beginning, Emerging, Proficient, Advanced, Exemplary.

Outcome #1: Students have increased opportunities for self-directed learning experiences.

BRIGHTBYTES DATA

Domains	Indicators	Baseline 2015	Year 2 2016	2017-2018 Goal		
	4C's- Teacher	Beginning	Emerging	Advanced		
Classussus	4C's- Student	Emerging	Proficient	Advanced	Score Legend	
Classroom	Assistive Tech	Emerging	Emerging	Advanced	Exemplary	
	Formative Assessment	Emerging	Emerging	Exemplary	1200-1300 Advanced	
	Access at Home	Advanced	Exemplary	Advanced	1100-1199	
Access	Access at School	Advanced	Advanced	Exemplary	Proficient 1000-1099	
	Online	Advanced	Advanced	Exemplary	Emerging 900-999	
Skills	Multimedia	Advanced	Advanced	Advanced	Beginning 800-899	
	3P's Policy, Procedures, Practices	Proficient	Proficient	Advanced		
Environment	Professional Learning	Emerging	Proficient	Exemplary		
	Beliefs	Advanced	Advanced	Advanced		

OTHER DATA

Domain	Indicators	Baseline 2015	Year 2 2016	2017-2018 Score (Revised Goals)
iOS App Requests	Percentage of teachers requesting apps for further exploration.	24% Increase from August to June	29% increase since 2014*	50% increase from 2014-2018

^{*14} additional teachers requesting apps for 2015-16

Analysis of Data: Student Outcome #1

Our goals for Student Outcome #1 are to be "Advanced" or "Exemplary" for all BrightBytes indicators and to see a 50% increase in teacher requests for iOS Apps. In reviewing 2015-2016 data, we improved enough to change a color on the BrightBytes maturity scale with the 4C's for teachers and students (communication, collaboration, critical thinking, and creativity), Access at Home, and Professional Learning. Two of these areas were targeted for improvement through the redesign of teacher institute days, showing that the redesign directly correlates to gains. While we didn't move to

another color on the scale in other categories, our numbers did improve and we expect to see additional gains next year.

Outcome #2: Students use technology to effectively initiate and engage in collaborative learning.

BRIGHTBYTES DATA

Domains	Indicators	Baseline 2015	Year 2 2016	2017-2018 Score (Revised Goals)	Score Legend
Classroom	4C's- Teacher	Beginning	Emerging	Advanced	Exemplary
	4C's- Student	Emerging	Proficient	Advanced	1200-1300
	Access at Home	Advanced	Exemplary	Advanced	Advanced
Access	Access at School	Advanced	Advanced	Exemplary	1100-1199 Proficient
	Foundational	Advanced	Exemplary	Exemplary	1000-1099
Skills	Online	Advanced	Advanced	Exemplary	Emerging 900-999
Okilis	Multimedia	Advanced	Advanced	Advanced	Beginning 800-899

OTHER DATA

Domain	Indicators	Baseline 2015	Year 2 2016	2017-2018 Score (Revised Goals)
Schoology Statistics	Percentage of teachers using Schoology to deliver content.	28% Increase from August to June	54% Increase from August to June	50% increase from 2014-2018
Google Drive Statistics- Teachers	Use of Google Docs, Sheets, Slides and Forms, number of published documents.	60% increase from August to June	47% Increase from November to June	

Data Analysis: Student Outcome #2

Our goals for Student Outcome #2 are to be "Advanced" or "Exemplary" for all BrightBytes indicators and to see a 50% increase in Schoology and Google Drive statistics. In reviewing 2015-2016 data, our Schoology and Google Drive numbers continue to be on the rise as more teachers have benefited from professional learning opportunities provided for these two resources. These upticks are evidence of students and teachers utilizing tools for communication and collaboration (2 of the 4C's). Outcome #2 has some of the same indicators as Outcome #1. As indicated for Outcome #1, we saw growth in the 4C's for teachers and students, Access at Home, and Foundational Skills.

Outcome #3: Students are savvy, strategic, responsible and balanced users of technology

Domains	Indicators	Baseline 2015	Year 2 2016	2017-2018 Score (Revised Goals)	Score Legend
	Assistive Tech	Emerging	Emerging	Advanced	Exemplary
Classroom	Digital Citizenship- Classroom Teacher		Proficient	Exemplary	1200-1300
	Digital Citizenship- Student	Proficient	Emerging	Exemplary	1100-1199
A	Access at Home		Exemplary	Advanced	Proficient
Access			Advanced	Exemplary	Emerging
	Online	Advanced	Advanced	Exemplary	900-999
Skills	Multimedia Advanced		Advanced	Advanced	Beginning 800-899

Student Behavior Data - Documented Instances (June 15)

	Trimester 1	Trimester 2	Trimester 3	TOTAL
iPad 2016-2017	10	0	25	35
iPad 2015-2016	5	18	5	28
Cell Phone 2016-2017	16	9	22	47
Cell Phone 2015-2016	21	24	15	60

Internet Content Filter Data (June 15)

	Total Searches Suspicious Searches		Percent of queries marked as suspicious	
	Total Cealches	Cuspicious deal cites	Torochi or queries marked as suspicious	
2016-2017	4237	127	3%	
2015-2016	3724	418	11%	

Paper Consumption Data

	2012-13	2013-14	2014-15	2015-16	2016-17	Percent Decrease
Total Paper Order	690 cases	784 cases	719 cases	407 cases (actual)* (447 estimate)	632 cases (actual)* (592 estimate)	18% from 2014-15 to 2015-16

^{*}Reported by the business office that there was an order discrepancy of approximately 40 cases in 2015-2016

Data Analysis: Student Outcome #3

Our goals for Student Outcome #3 are to be "Advanced" or "Exemplary" for all BrightBytes indicators and to see a 50% decrease in student behavior incidents, suspicious or blocked internet searches and paper consumption.

In reviewing the data for 2016-2017, we improved in Digital Citizenship for Teachers and Technology and Access at Home. Our scores decreased for Digital Citizenship for Students, but in digging deeper into the data, it is clear that our numbers increased at the Middle Schools, where we implemented a new digital citizenship protocol for all teachers and students, and decreased at the elementary level. Over the course of this school year, New Trier Township technology educators have collaboratively developed grade-specific outcomes for digital citizenship. We will be able to develop and implement learning activities for students based on these common outcomes.

Another data point that decreased was Assistive Technology. Assistive technology, in terms of the BrightBytes data collection includes the use of audio and video content and posting assignments online. Although the overall score went down in this category, the number of teachers using Assistive Technology has increased. Our goal for Student Behavior and Internet Content Filter is to see a 10% decrease from year to year. This year, our student behavior incidents went up for both cell phones and iPads. Due to a new leadership team at Washburne, we're attributing the increase to better incident tracking and are anticipating a decrease next year. One of the schools inadvertently ordered a pallet less of paper in 2015-2016 leading to a sharp decline in our paper consumption. For 2016-2017, the school ordered extra paper to compensate for the ordering mistake. With these numbers taken into consideration, our overall paper consumption has decreased 18% since 2014. We are still targeting a goal of 50% decrease from 2014 to 2018.

Student & Staff Interviews

Formal focus groups took place with students and parents this year, informal conversations took place with the teachers. Based on parent feedback, we held two Winnetka Parent Institutes (WPI), "MLI: A Day in the Life" and "Social Media". The presentations can be found on the District Website-

https://www.winnetka36.org/wpi. Both sessions were well received and feedback was gathered regarding future WPI events. Suggested topics for 2016-2017 included "A Day in the Life- Elementary Perspective", "Keeping Kids Safe Online", and "Google for Parents".

Students in grades 4-8 participated in small focus groups. Some themes from their feedback included...

- Technology makes them more efficient
- iPads are being used more than last year
- Some students find them distracting
- Students are looking for some standardization from their teachers

The students provided insightful feedback and were overall very positive about having iPads accessible to them. There were a couple of students, in 5th grade, who said they would rather be using paper and pencil. When asked why, the response from one student was that having the iPads increases her stress level. She felt pressure to always have it with her and always have it charged.

Next Steps

Based on student feedback the tech department will be implementing a few changes for 2016-2017:

- New case for 5th graders, 7th and 8th grade
- Options for students to purchase their own keyboard folio case or different case than the district provided case
- Turn Siri off
- Work with teachers to streamline the various systems they are using to deliver homework assignments for students

In terms of iPad management, three significant changes are happening over the summer- mobile device management, District-wide infrastructure updates, and the release of *Apple Classroom*. The transition from a free Mobile Device Management System to a paid system was necessary because the free system no longer supported features that were updated with the latest iOS release and we plan to leverage those features, *Apple Classroom* is one of those features. *Apple Classroom* allows teachers to see every student's iPad from their iPad and to manage what apps are allowed be in use at any given time. All of these system-wide changes will provide for more up to date management of devices and more granular control for the tech department and for teachers. We're looking forward to these changes and feel they will be very advantageous for all.

Technology is constantly evolving and it's difficult to keep up with the latest and greatest. Our focus with the Mobile Learning Initiative has always been about teaching and learning with technology, not technology for technology's sake. With this in mind, we will continue to work on several key indicators for the 2016-2017 school year and similar to last year, we will work these into our Strategic Plan Goals.

Goal areas for 2016-2017

- 1. Assistive Technology
- 2. Formative Assessment
- 3. Digital Citizenship
- 4. Access for Elementary Schools

Through the lens of the strategic plan, our work will continue with the District Technology Committee, Administrative Team and Central Office Team as well as focus groups of students, teachers and parents to prioritize professional learning opportunities and support teachers and students with Mobile Learning.

2016-2017 Goals for MLI

- Create and Implement K-4 Digital Citizenship curriculum consistent with New Trier Township student learning outcomes (Goal 3)
- Present Winnetka Parent Institute series focused on technology integration and digital citizenship (Goal 3)
- Continue to decrease the student-to-device ratios and increase access to a variety of devices (Goals 1, 2, 3, 4)
- Continue to build the repository of training resources (Goals 1, 2, 3)
- Implement, monitor and evaluate professional learning for using technology effectively to assess student learning, differentiate instruction, and provide experiential learning opportunities (Institute Days, Winnetka University, Job-Embedded) (Goals 1, 2, 3)
- Provide professional learning opportunities focused on assistive technology (Goal 1)

Working together, Winnetka parents, students, teachers and administrators will transform teaching and learning to continually improve upon our three student learning outcomes of

- 1. Students have increased opportunities for self-directed learning experiences.
- 2. Students use technology to effectively initiate and engage in collaborative learning.
- 3. Students are savvy, strategic, responsible and balanced users of technology.

We will continue to collect data, set goals based on the data, and share our progress with the School Board using the MLI Scoring Template.