



A Community of Learners

Informational Memo: Mobile Learning Initiative Outcomes: Measures After Year 3 Implementation

TO: School Board
Superintendent Kocanda

FROM: Maureen Chertow Miller, *Director of Technology*

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Background Information

The Mobile Learning Initiative (MLI) has just completed Year 3 of implementation. Prior to Year 1, the District defined three student-learning outcomes for the MLI based on best practice, research and feedback from staff and students ([School Board Presentation, October 2014](#)). 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.

We use multiple measures to assess these outcomes, but the CASE (Classroom, Access, Skills, and Environment) Framework from BrightBytes provides the most data. [For additional background, refer to June 9, 2015 packet, page 81](#)

Goals for Year 3

The three major goals set after Year 1 (Digital Citizenship, Professional Learning, and the 4C's (Communication, Collaboration, Creativity, Critical Thinking) for students and teachers), continue to be our focus through Year 3 with the addition of Assistive Technology, Formative Assessment and Access for the elementary schools. Some steps to achieve these goals included the following:

New Trier Township [Digital Citizenship K-8 curriculum](#) created collaboratively through the Township Tech Leader Professional Learning Community. In 2017-2018, teachers and tech coaches will work to identify key areas to seamlessly integrate the framework. (Ex. while teaching commerce in 2nd grade, online commerce will be included in the learning.)

District Institute Days- Professional Learning Focused on the 4C's Similar to 2015-2016,

for each of our Institute Days ([November](#) and [February](#)), half of the day included opportunities for professional learning with teachers teaching teachers about how to integrate technology into their classrooms. Topics included SeeSaw, virtual reality, makerspaces and engaging presentations, assistive technology, and formative assessment.

Additional Devices for Elementary Schools

To balance the distribution of devices in all three elementary schools and the elimination of computer labs at Crow Island and Hubbard Woods School the following devices were added to each school's fleet.

| School | Total iPads (new this year) | Total Laptops (new this year) | Total Chromebooks (new this year) | Total Devices/Total Students | Ratio devices/student |
|---------------|--------------------------------|----------------------------------|--------------------------------------|------------------------------|-----------------------|
| Crow Island | 217 (76) | 82 (42) | 50 (0) | 349/380 | .92 |
| Greeley | 150 (22) | 5(0) | 50 (25) | 205/224 | .92 |
| Hubbard Woods | 229 (40) | 50 (0) | 25 (0) | 295/246 | 1.12 |

Measuring our Outcomes - June 2017

The following sets of data show our progress from Fall 2016 to Spring 2017. We have seen an overall increase in all four categories (Classroom, Access, Skills, and Environment).

As a reminder, BrightBytes uses a five color maturity scale of Beginning, Emerging, Proficient, Advanced, Exemplary.

| | | | | | |
|---------------------------|--------------------------|-------------------------|-----------------------------|---------------------------|----------------------------|
| CASE™ Score Legend | ● Beginning 800 - 899 | ● Emerging 900 - 999 | ● Proficient 1000 - 1099 | ● Advanced 1100 - 1199 | ● Exemplary 1200 - 1300 |
|---------------------------|--------------------------|-------------------------|-----------------------------|---------------------------|----------------------------|

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

BRIGHTBYTES DATA

| Domains | Indicators | Fall 2016 (October) | Spring 2017 (May) | 2017-2018 Goal | <div>Score Legend</div> <ul style="list-style-type: none"> Exemplary 1200-1300 Advanced 1100-1199 Proficient 1000-1099 Emerging 900-999 Beginning 800-899 |
|-------------|--|------------------------|----------------------|-------------------|--|
| Classroom | 4C's- Teacher | Emerging | Emerging | Advanced | |
| | 4C's- Student | Emerging | Proficient | Advanced | |
| | Assistive Tech | Proficient | Proficient | Advanced | |
| | Formative Assessment | Emerging | Emerging | Exemplary | |
| Access | Access at Home | Exemplary | Exemplary | Advanced | |
| | Access at School | Advanced | Advanced | Exemplary | |
| Skills | Online | Proficient | Advanced | Exemplary | |
| | Multimedia | Advanced | Advanced | Advanced | |
| Environment | 3P's Policy, Procedures, Practices | Proficient | Proficient | Advanced | |
| | Professional Learning | Proficient | Emerging | Exemplary | |
| | Beliefs | Advanced | Advanced | Advanced | |

OTHER DATA

| Domain | Indicators | Year 3 2017 | 2017-2018 Score (Revised Goals) |
|------------------|---|--------------------------|------------------------------------|
| iOS App Requests | Percentage of teachers requesting apps for further exploration. | 45% increase since 2014* | 50% increase from 2014-2018 |

*9 additional teachers requesting apps for 2016-17 (15% increase for 2017)

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 2016-2017 data, we are still “Emerging” for teachers and “Proficient” for students in the BrightBytes maturity scale with the 4C’s for teachers and students (communication, collaboration, critical thinking, and creativity), however our raw score for teachers increased by 15 points and our raw score for students increased by 21 points, these are significant gains.

Access at school was “Advanced” last year and remains “Advanced,” but there has been an increase of 14 points. As noted in the memo, we have added devices to our elementary fleet to provide more access to teachers and students.

Professional Learning dropped from “Proficient” to “Emerging” with a net loss of 11 points. Teachers have expressed an interest in more personalized professional learning and Assistant Superintendent of Human Resources and Professional Learning has proposed changes for next year.

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

BRIGHTBYTES DATA

| Domains | Indicators | Fall 2016 (October) | Spring 2017 (May) | 2017-2018 Goal | Score Legend |
|-----------|------------------|---------------------|-------------------|----------------|---|
| Classroom | 4C's- Teacher | Emerging | Emerging | Advanced |  Exemplary 1200-1300  Advanced 1100-1199  Proficient 1000-1099  Emerging 900-999  Beginning 800-899 |
| | 4C's- Student | Emerging | Proficient | Advanced | |
| Access | Access at Home | Exemplary | Exemplary | Advanced | |
| | Access at School | Advanced | Advanced | Exemplary | |
| Skills | Foundational | Exemplary | Exemplary | Exemplary | |
| | Online | Proficient | Advanced | Exemplary | |
| | Multimedia | Advanced | Advanced | Advanced | |

OTHER DATA

| Domain | Indicators | Baseline 2015 | Year 3 2017 | 2017-2018 Score (Revised Goals) |
|-----------------------------------|--|---------------|---|--|
| Schoology Statistics | Percentage of teachers using Schoology to deliver content. | 28% Increase | 2% increase | 50% increase from 2014-2018 Goal Met |
| Google Drive Statistics- Teachers | Use of Google Docs, Sheets, Slides and Forms, number of published documents. | 60% increase | 17% Increase (Teachers) 9600% Increase* (Students) | 50% increase from 2014-2018 Goal Met |

*Students are offloading all photos, pictures, and projects to Google Drive to maintain storage space on their iPads.

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 2016-2017 data, our Schoology and Google Drive numbers continue to be on the rise and our target goal has been met. Schoology at The Skokie School decreased because some teachers have been using Google Classroom, another Learning Management System, instead.

Online Skills for students moved to the “Advanced” category with a 30 point increase. Outcome #2 has some of the same indicators as Outcome #1. As indicated for Outcome #1, we saw growth in the 4C’s for both teachers and students, and increased access at school for our students.

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

| Domains | Indicators | Fall 2016 (October) | Spring 2017 (May) | 2017-2018 Goal | Score Legend ● Exemplary 1200-1300 ● Advanced 1100-1199 ● Proficient 1000-1099 ● Emerging 900-999 ● Beginning 800-899 |
|-----------|-----------------------------|------------------------|----------------------|-------------------|---|
| Classroom | Assistive Tech | Proficient | Proficient | Advanced | |
| | Digital Citizenship-Teacher | Proficient | Proficient | Exemplary | |
| | Digital Citizenship-Student | Emerging | Emerging | Exemplary | |
| Access | Access at Home | Exemplary | Exemplary | Advanced | |
| | Access at School | Advanced | Advanced | Exemplary | |
| Skills | Online | Proficient | Advanced | Exemplary | |
| | Multimedia | Advanced | Advanced | Advanced | |

Student Behavior Data - Documented Instances (May 26)

| | Trimester 1 | Trimester 2 | Trimester 3 | TOTAL |
|----------------------|-------------|-------------|-------------|-------|
| iPad 2016-2017 | 4 | 6 | 0 | 10 |
| iPad 2015-2016 | 10 | 0 | 25 | 35 |
| | | | | |
| Cell Phone 2016-2017 | 6 | 3 | 10 | 19 |
| Cell Phone 2015-2016 | 16 | 9 | 22 | 47 |

Internet Content Filter Data (May 26)

| | Total Searches | Suspicious Searches | Percent of queries marked as suspicious |
|-----------|----------------|---------------------|---|
| 2016-2017 | 5332 | 391 | 7% |
| 2015-2016 | 3724 | 418 | 11% |
| 2014-2015 | 4237 | 127 | 3% |

Paper Consumption Data

| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | Percent Change |
|--------------------------|-----------|-----------|-----------|-----------|------------|-----------|----------------|
| Total Paper Order | 690 cases | 784 cases | 719 cases | 407 cases | 632 cases. | 839 cases | 22% increase |

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 across the board for all BrightBytes indicators related to this outcome.

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 are at a low for both cell phones and iPads. We have seen a 69% drop from our highest incidence of each.

Paper Consumption is another data point we continue to monitor. Our paper order has increased in the past two years and is at an all-time high. A new copier solution has been implemented for next year that should cut down on the number of abandoned print jobs.

Student & Staff Interviews

Conversations took place with the teachers and students regarding technology use in the classroom. Both have come to rely heavily on technology as part of their daily life and workflow. Teachers in the elementary schools continue to request more devices because it is becoming too difficult to manage sharing carts. 8th grade iPads will be repurposed into the elementary fleet, but a refresh that includes elementary school is something to be considered for next year as some of these iPads are in their 4th year of use.

Student reports still indicate a mix of those who like using technology and those who see it as a distraction or prefer paper, but more are in the category of preferring technology.

A resounding need, heard from both teachers and students, is the desire for keyboards in the middle schools. The District technology team will be focusing on the next device for a refresh in 2018-2019 and these considerations will be factored into the research. The refresh research will consider iPads, Chromebook, as well as other laptops and tablets.

Next Steps

Based on student feedback the tech department will be implementing changes for 2017-2018:

- New case for 6th grade students after they completed a research project to determine their preferred case.
- Implement Apple Classroom, launch was delayed due to incompatibility with our systems that has since been resolved.
- Investigate more granular control of the Mobile Device Management portal to allow for more teacher controls to be utilized.

2017-2018 Goals for MLI

- Implement K-8 Digital Citizenship curriculum consistent with New Trier Township student learning outcomes (Goal 3)
- Continue Winnetka Parent Institute series focused on technology integration and digital citizenship (Goal 3)
- 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, technology that helps students with their learning, ex. Digital textbooks, display devices, chrome extensions to support reading and writing. (Goal 1)

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](#).