

Canvas/Chromebook Technology Initiative - UHS

April 2018

A dark blue diagonal graphic that starts from the bottom left corner and extends towards the top right corner, covering the bottom half of the slide.

Objective

To provide a recommendation to the School Board regarding a path forward with the Canvas/Chromebook technology initiative at the high school.

Timeline

2013 - 2014

UCFSD investigates a 1:1 iPad implementation. Recommendation is made to focus on an LMS (Canvas) integration/pilot in 2014-2015.

2014 - 2015

The District introduces a Canvas Pilot at secondary schools with a core group of volunteer teachers. Recommendation for Technology Integration Pilots at CFPMS and UHS.

2015 - 2016

A CFPMS 6th grade team pilots a Canvas/Chromebook integration and the District Canvas Pilot is expanded to additional secondary teachers. Favorable stakeholder survey results for the middle school pilot lead to a recommendation for CFPMS to fully integrate Canvas/Chromebooks in 2016-2017. Survey data suggested further study of a technology integration direction at UHS and whether Chromebooks are the right device.

Timeline Continued...

Recommendation for 2018-2019

2016 - 2017

CFPMS integrates Canvas for all teachers and Chromebooks for all students. Recommendation to Pilot the Canvas/Chromebook integration at UHS for 9th grade students and expand Canvas integration to include all UHS teachers.

2017 - 2018

All UHS teachers integrate Canvas while piloting Chromebooks for all 9th grade students. CFPMS begins Year 2 of Canvas/Chromebook integration.

We recommend that we expand the Canvas/Chromebook Technology Integration plan to include all middle school and high school staff and students for the 2018-2019 School Year.

- Canvas has proven to be an effective LMS
- Canvas/Chromebooks are easy and efficient to manage
- Chromebooks satisfy the evaluation criteria for a device
- Chromebooks provide the most cost effective/sustainable solution for technology needs of students

A Balanced Approach to Screen Time

As a District, we need to be balanced and intentional in how we handle our students and their exposure to screen time. Research suggests that providing a balanced approach to screen time and “unplugged” time and providing parents and students with guidance on managing digital media is essential.

[\(Family Media Plan - The American Academy of Pediatrics\)](#)

The American Academy of Pediatrics (AAP) also calls for balance in digital media and screen time and has provided recommendations for screen time use in adolescents.

[See Recommendations](#)

Student Focus Group Comment: The amount of time we spend on and off the Chromebooks in class is a balanced amount of time.

[Frequency of Chromebook Use at UHS](#)

Evaluation Criteria (June 2015)

1. Is there improved student achievement and learning?
2. Is there enhanced student engagement?
3. Is there greater efficiency and improved classroom organization?
4. Is there improved research and information fluency?
5. What do our parents, students, and teachers think of the pilot?
6. Can our technology infrastructure support additional devices?
7. Is the Chromebook the right device for students?

Survey Results from Student, Teacher, and Parent Surveys

Survey to students in November
(9th grade only - 322 responses out of 337)

[Student Survey Results](#)

Survey to teachers in November
(31 responses from teachers - 21 with sections of
only 9th graders)

[Teacher Survey Results](#)

Survey to parents in November
(63 responses)

[Parent Survey Results](#)

Is there improved student achievement and learning?

Middle School Performance Data

While it is impossible to determine if the Canvas/Chromebook integration is responsible for any changes in PSSA achievement, data suggests our students performed in a comparable manner than before the technology integration. In fact, the students performed higher in 2017 than in 2015 and 2016 in both 6th and 7th grades while scores were lower this year in 8th.

[\(Click Here for Middle School PSSA Data\)](#)

Student Survey

- 98% report that they use their Chromebook to work with Canvas.
- 93% report that they use their Chromebook to access their online textbook.
- 70% report that it is important they can bring the Chromebook to class each day and home each night. (17% Neutral)

Is There Enhanced Student Engagement?

Teacher Survey

- 58% report that having daily access to Chromebooks provides opportunities for engaging lessons and activities that were not practical prior to all students having access to a device. (26% Neutral)

Parent Survey

- 35% report that their child seems more engaged in school when using the Chromebook. (47% Neutral)

Student Survey

- 40% report that when they use the Chromebooks in class, they are more interested or engaged. (37% Neutral)

Is there greater efficiency and improved classroom organization?

Student Survey

- 65% report using their Chromebook helps them to use their homework time more efficiently. (21% Neutral)
- 65% report that the Chromebook helps them to be better organized. (23% Neutral)

Parent Survey

- 46% report that their child seems better organized since incorporating the Chromebook. (36% Neutral)

Teacher Survey

- 30% report that since having the Chromebook, students seem better organized. (50% neutral)

Teacher Focus Group Comment: Not having to worry about cart availability and the loss of time getting Chromebooks out of a cart is a huge plus for more efficient classroom instruction.

Is there improved research and information fluency?

Parent Survey

- 71% report that having access to the Chromebook has helped their child become more digitally literate in research and evaluation of information. (27% Neutral)

Student Survey

- 71% report that they are more proficient with their ability to research and evaluate information online since having access to their Chromebook each day. (20% Neutral)

Teacher Survey

- 39% report that the Chromebook has helped students become more digitally literate in research and evaluation of information. (48% Neutral)

Teacher Focus Group Comment: More devices are being used in the Cyber Cafe and Library. Students are using their Chromebooks to complete homework and do research during study halls.

What do our parents, students, and teachers think of the pilot?

Student Survey

- 68% report that having access to the Chromebook each day helps them to be prepared for the 21st Century workplace and their educational endeavors after Unionville. (21% Neutral)

Parent Survey

- 76% report that having access to the Chromebook each day helps their child to be prepared for the 21st Century workplace and their educational endeavors after Unionville. (14% Neutral)

Teacher Survey

- 55% report that having access to the Chromebook each day helps students to be prepared for the 21st Century workplace and their educational endeavors after Unionville. (32% Neutral)

Teacher Focus Group Comment: Not having the device in the upper grades creates a challenge for both the students and teachers. The teachers are holding back from implementing more technology resources and content due to split grade level classes.

Technology infrastructure

Parent Survey

- 78% report that their child has reported few difficulties in connecting to and accessing the internet at school. (11% Neutral)

Student Survey

- 78% report that they have been able to easily connect to and access the internet when using the Chromebook. (13% Neutral)

Student Focus Group Comments: When asked about connecting to the UHS wireless network, students did not report any connection issues or complaints about the network dropping.

Teacher Survey

- 90% report that students have been able to easily connect to and access the internet when using the Chromebook. (7% Neutral)

Teacher Focus Group Comments: When asked about how the network has handled the increase in devices, the teachers reported they have not had any connection issues when a class uses their Chromebooks.

Is the Chromebook the right device for students?

Student Survey

- 71% report that the Chromebook meets their educational technology needs as a UHS student. (20% Neutral)

Student Focus Group Comment:

Students believed that if they transitioned to 10th - 12th grade without their Chromebooks, they would lose a useful educational tool.

Teacher Survey

- 55% report that the Chromebook meets the learning needs of their students. (35% Neutral)

Parent Survey

- 72% report the Chromebook meets the educational technology needs of their children. (16% Neutral)

Student Focus Group Comments

(Follow Up After March Board
Presentation)

Student Focus Group (Two Groups of 7 - 8 Students)

- Students mentioned that Chromebooks are not used frequently in mixed classes because only the 9th grade class has Chromebooks.
- Students report the Chromebooks are used throughout the week but not used every class period.
- Students feel the neutral category is somewhat large because some students may have been unsure on what the question was asking and or uncertain on how to respond.
- Survey Question - "When we use the Chromebooks in class, I am more interested or engaged?" Why 25% Disagree?
 - Students have varying interpretations of what engagement means in the classroom (i.e. not using in the classroom regularly; not using it in mixed classes; and some students prefer paper and pencil for note taking)

Teacher Focus Group Comments

(Follow Up After March Board
Presentation)

Teacher Focus Group (4 Teachers, 1 Counselor)

- Teachers mentioned that knowing students have their own chromebooks saves them the hassle of worrying about booking carts and losing instructional minutes pulling devices on/off carts.
- One reason why many teachers were neutral on survey questions was that since this is the 1st year of having Chromebooks in the high school, there hasn't been significant enough time and investment to make definitive determinations.
- Survey Question - "The Chromebook device meets my instructional needs as a teacher?" - 35% Neutral
 - The science and math departments report that not all of their specialized software works on the Chromebooks. (Laptop carts are used for those instances.)
- Teachers are continuing to develop their Canvas courses with the hope that next year all students will be able to access Canvas with a Chromebook.

<u>School District</u>	<u>1:1 Initiative?</u>	<u>2017-18 Year Plan</u>	<u>2018-19 Year Plan</u>	<u>Device</u>	<u>Take Device Home?</u>	<u>Tech Fee</u>
UCF	Yes	6th-9th	6th-12th	Chromebook	Yes	\$20.00
Avon Grove	Yes	6th-9th	5th-12th	Chromebook	Yes	\$50.00
Oxford	Yes	K-12th	K-12th	iPad	Yes (9th-12th)	\$30.00
Kennett Consolidated	No		BYOT 9th-12th (Exploration)			
Coatesville	No	5 Chromebooks per classroom	BYOT 9th-12th (Exploration)	N/A	N/A	N/A
Tredyffrin/Easttown	Yes	9th-12th	9th-12th	Windows	Yes	\$50.00 (\$100 family cap)
Great Valley	Yes	5th,6th,9th,10th	K-12th (by 2020)	iPad	Yes	\$75.00
Downingtown	Yes	6th-12th	K-12th	iPad (K-8th) PC OR Macbook (9th-12th)	Yes (6th-12th)	\$75.00 (iPad/PC) \$150.00 (Macbook for STEM) \$200.00 (Macbook)
Owen J. Roberts	Yes	K-12th	K-12th	iPad (K-8) Chromebook (9-12)	Yes (9th-12th)	\$25.00
Octorara	Yes	7th-12th	7th-12th	iPad (Current) Chromebook (Next Year)	Yes	\$30.00
West Chester	Yes	8-12th	8-12th	Windows	Yes	\$50.00

<u>2018 Ranking</u>	<u>School District</u>	<u>1:1 Initiative?</u>	<u>2017-18 Year Plan</u>	<u>2018-19 Year Plan</u>	<u>Device</u>	<u>Take Device Home?</u>	<u>Tech Fee</u>
1	Tredyffrin-Easttown School District	Yes	9th - 12th	9th - 12th	Dell Laptop	Yes	\$50
2	Radnor Township School District	Yes	9th - 12th	Unknown	iPad	Yes	\$45
3	North Allegheny School District	Yes	6th - 12th	Unknown	iPads at MS / HP Laptop at HS	Yes	\$35
4	Lower Merion School District	Yes	9th - 12th		Macbooks & Macbook Air	Yes	\$70
5	Unionville-Chadds Ford School District	Yes	6th - 9th	6th - 12th	Chromebook	Yes	\$20
6	Fox Chapel Area School District	Yes	6th - 8th		iPads	Yes	
7	Mt. Lebanon School District	No					
8	Upper St. Clair School District	Yes	5th - 12th		iPads	Yes	\$35
9	Great Valley School District	Yes	5th, 6th, 9th, 10th	4th, 5th, 6th, 7th, 9th,10th,11th	iPads	Yes	\$75
10	Colonial School District	No	BYOD 9th - 12th		BYOD		
11	North Penn School District	Yes	6th - 12th	3 Year Plan K - 12th	Chromebooks	Yes	\$30
12	Central Bucks School District	Yes	7th Grade Only		HP Probook	Yes	\$50
13	Wissahickon School District	Yes	6th - 12th		Dell Laptop	Yes	\$40
14	Quaker Valley School District	Yes	6th - 12th		Chromebooks at MS / Dell Laptops at HS	Yes	
15	School District of Haverford Township	Yes	9th-12th	MS BYOD / 9th - 12th Chromebooks	Chromebooks	Yes	\$30
16	State College Area School District	Yes	3rd - 12th		Chromebooks	Yes	\$20

Recommendation and Budget (Annual Cost)

Based on \$20 tech fee

<u>Year 1</u> 2016-17 \$190,512	<u>Year 2</u> 2017-18 \$40,700	<u>Year 3</u> 2018-19 \$262,947
Implementation 6th-8th	6th-9th	6th-12th
<u>Year 4</u> 2019-20 \$257,205	<u>Year 5</u> 2020-21 \$245,355	<u>Year 6</u> 2021-22 \$245,355
6th-12th	6th-12th	6th-12th

Highlights by Year - Additional budget needed for initiative

Year 1: Chromebook rollout for 6th, 7th, 8th grade classes

Year 2: Continue Chromebook rollout adding 9th grade.

Year 3: Continue Chromebook rollout adding 10th, 11th, and 12th

Year 4: Maintain Program 6th - 12th

Year 5: Maintain Program 6th - 12th

Year 6: Maintain Program 6th - 12th

Additional Resources:

[Financial Details](#)

Recommendation and Budget (Annual Cost)

Based on \$50 tech fee

<u>Year 1</u> 2016-17 \$190,512	<u>Year 2</u> 2017-18 \$40,700	<u>Year 3</u> 2018-19 \$196,197
Implementation 6th-8th	6th-9th	6th-12th
<u>Year 4</u> 2019-20 \$178,455	<u>Year 5</u> 2020-21 \$166,605	<u>Year 6</u> 2021-22 \$166,605
6th-12th	6th-12th	6th-12th

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Year 6: Maintain Program 6th - 12th

Additional Resources:

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Tech Fee Comparison

\$20 and \$50 yearly tech fee

<u>Year 3</u> 2018-19 \$262,947	<u>Year 4</u> 2019-20 \$257,205	<u>Year 5</u> 2020-21 \$245,355
6th-12th \$20.00 tech fee	6th-12th \$20.00 tech fee	6th-12th \$20.00 tech fee
<u>Year 3</u> 2018-19 \$196,197	<u>Year 4</u> 2019-20 \$178,455	<u>Year 5</u> 2020-21 \$166,605
6th-12th \$50.00 tech fee	6th-12th \$50.00 tech fee	6th-12th \$50.00 tech fee

Highlights by Year - Additional budget needed for initiative

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Technology Integration Transition Plan

Students

- Current 9th grade students take Chromebooks to 10th grade
- 11th grade students given Chromebooks from UHS carts
- 12th grade students receive Chromebooks from 8th grade device return
- Purchase devices for upcoming 6th and 9th grade students

Staff

- Continue PD for Canvas and other online resources
- Provide shadow day(s)
- Provide opportunities for teacher collaboration

Questions?

