

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

SSIP Overview

Page Last Modified: 11/08/2018

Institution ID

80000038645

1. Please enter the name of the person to contact regarding this submission.

Kimberly Hromada

- 1a. Please enter their phone number for follow up questions.

518-863-8412 Extension 23

- 1b. Please enter their e-mail address for follow up contact.

khromada@edinburgcs.org

2. Please indicate below whether this is the first submission, a new or supplemental submission or an amended submission of an approved Smart Schools Investment Plan.

First submission

3. All New York State public school districts are required to complete and submit a District Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. Districts that include investments in high-speed broadband or wireless connectivity and/or learning technology equipment or facilities as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department.

By checking this box, you certify that the school district has an approved District Instructional Technology Plan survey on file with the New York State Education Department.

District Educational Technology Plan Submitted to SED and Approved

4. Pursuant to the requirements of the Smart Schools Bond Act, the planning process must include consultation with parents, teachers, students, community members, other stakeholders and any nonpublic schools located in the district.

By checking the boxes below, you are certifying that you have engaged with those required stakeholders. Each box must be checked prior to submitting your Smart Schools Investment Plan.

Parents
 Teachers
 Students
 Community members

- 4a. If your district contains non-public schools, have you provided a timely opportunity for consultation with these stakeholders?

Yes
 No
 N/A

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

SSIP Overview

Page Last Modified: 11/08/2018

5. **Certify that the following required steps have taken place by checking the boxes below: Each box must be checked prior to submitting your Smart Schools Investment Plan.**

- The district developed and the school board approved a preliminary Smart Schools Investment Plan.
- The preliminary plan was posted on the district website for at least 30 days. The district included an address to which any written comments on the plan should be sent.
- The school board conducted a hearing that enabled stakeholders to respond to the preliminary plan. This hearing may have occurred as part of a normal Board meeting, but adequate notice of the event must have been provided through local media and the district website for at least two weeks prior to the meeting.
- The district prepared a final plan for school board approval and such plan has been approved by the school board.
- The final proposed plan that has been submitted has been posted on the district's website.

5a. **Please upload the proposed Smart Schools Investment Plan (SSIP) that was posted on the district's website, along with any supporting materials. Note that this should be different than your recently submitted Educational Technology Survey. The Final SSIP, as approved by the School Board, should also be posted on the website and remain there during the course of the projects contained therein.**

Smartbonds Act For Website (1).doc
 tech Plan 2014-2018 - Google Docs.pdf
 Smart School Website Posting.pdf
 School Connectivity.pdf

5b. **Enter the webpage address where the final Smart Schools Investment Plan is posted. The Plan should remain posted for the life of the included projects.**

<http://www.edinburgcs.org/school-connectivity---smart-schools-investment-plan.html>

6. **Please enter an estimate of the total number of students and staff that will benefit from this Smart Schools Investment Plan based on the cumulative projects submitted to date.**

96

7. **An LEA/School District may partner with one or more other LEA/School Districts to form a consortium to pool Smart Schools Bond Act funds for a project that meets all other Smart School Bond Act requirements. Each school district participating in the consortium will need to file an approved Smart Schools Investment Plan for the project and submit a signed Memorandum of Understanding that sets forth the details of the consortium including the roles of each respective district.**

- The district plans to participate in a consortium to partner with other school district(s) to implement a Smart Schools project.

8. **Please enter the name and 6-digit SED Code for each LEA/School District participating in the Consortium.**

Partner LEA/District	SED BEDS Code
(No Response)	(No Response)

9. **Please upload a signed Memorandum of Understanding with all of the participating Consortium partners.**

(No Response)

10. **Your district's Smart Schools Bond Act Allocation is:**

\$84,541

11. **Enter the budget sub-allocations by category that you are submitting for approval at this time. If you are not budgeting SSBA funds for a category, please enter 0 (zero.) If the value entered is \$0, you will not be required to complete that survey question.**

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

SSIP Overview

Page Last Modified: 11/08/2018

	Sub-Allocations
School Connectivity	20,992
Connectivity Projects for Communities	0
Classroom Technology	63,458
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	84,450

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

School Connectivity

Page Last Modified: 11/08/2018

1. In order for students and faculty to receive the maximum benefit from the technology made available under the Smart Schools Bond Act, their school buildings must possess sufficient connectivity infrastructure to ensure that devices can be used during the school day. Smart Schools Investment Plans must demonstrate that:
 - sufficient infrastructure that meets the Federal Communications Commission’s 100 Mbps per 1,000 students standard currently exists in the buildings where new devices will be deployed, or
 - is a planned use of a portion of Smart Schools Bond Act funds, or
 - is under development through another funding source.

Smart Schools Bond Act funds used for technology infrastructure or classroom technology investments must increase the number of school buildings that meet or exceed the minimum speed standard of 100 Mbps per 1,000 students and staff within 12 months. This standard may be met on either a contracted 24/7 firm service or a "burstable" capability. If the standard is met under the burstable criteria, it must be:

 1. Specifically codified in a service contract with a provider, and
 2. Guaranteed to be available to all students and devices as needed, particularly during periods of high demand, such as computer-based testing (CBT) periods.

Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

We have surpassed the need of 100 Mbps per 1,000 students since our need is 7.8 and we currently have a speed of 10 Mbps and will be upgrading to 25 Mbps in the Fall of 2019.

- 1a. If a district believes that it will be impossible to meet this standard within 12 months, it may apply for a waiver of this requirement, as described on the Smart Schools website. The waiver must be filed and approved by SED prior to submitting this survey.

By checking this box, you are certifying that the school district has an approved waiver of this requirement on file with the New York State Education Department.

2. Connectivity Speed Calculator (Required)

	Number of Students	Multiply by 100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	Current Speed in Mb	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	78	7,800	7.8	10	25	Currently Met

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

School Connectivity

Page Last Modified: 11/08/2018

3. Describe how you intend to use Smart Schools Bond Act funds for high-speed broadband and/or wireless connectivity projects in school buildings.

The district intends to use the Smart School Bond Act funds to achieve effective high-speed broadband and wireless connectivity it is necessary to update all existing wiring and/or wireless access points as well as install new hardware throughout the building. This will include but is not limited to:

- Network Closet
- Install patch panel to accommodate AP's and hardwired devices with additional slots for future expansion.
- Install a wall mount rack to hold patch panel, switches, firewall and other equipment.
- Wire the district with new network cabling from network closet (Cat 6).
- Hardware Equipment Needs
- Firewall/Gateway Antivirus/Content Filter All-in-One
- Switches
- 1- 24 port POE switch to accommodate wireless AP's
- 2- 48 port Non-POE switch to accommodate hardwire devices
- 15 Wireless POE AP's
- Rack mountable power strip connected to UPS

Battery Backup

- Emerson's Liebert External 3000VA UPS
- AC 120 V, 2700 Watt, 3000 VA 9 Ah
- RS-232
- USB
- 6 Output Connectors
- PFC
- 2U Rack-Mountable - GXT4-3000RT120
- APC BR1500G Back-UPS
- XS LCD 1500VA UPS Battery Backup
- Master Control, 1500VA
- 10-Outlet
- 120V

Rack Mount

- Tripp Lite's 13U 4-Post Open Frame Rack
- Supports 1000lbs of rackmount equipment
- Adjustable mounting depth (22 to 36 inches)
- Textured powder coat finish
- Heavy-duty cold-rolled steel construction
- Numbered mounting positions
- Bolt down provisions
- 1.5MB Packet Buffer Size
- 8,000 MAC Address Table Size
- 52 Gbps Switching Capacity
- Up to 38.6 Mpps Throughput
- elf squaring design
- Black finish
- Easy assembly

Meraki MR33 IEEE802.11ac 1.30 Gbit/s Wireless Access Point

- 2x2 MU-MIMO 802.11ac Wave 2
- 1.3 Gbps* aggregate dual-band frame rate
- 24x7 real-time WIPS/WIDS, spectrum analytics, and WiFi location tracking via dedicated 3rd radio
- Integrated Bluetooth Low Energy Beacon and scanning radio
- Integrated enterprise security and guest access

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

School Connectivity

Page Last Modified: 11/08/2018

- Application-aware traffic shaping
- Optimized for voice and video
- Self-configuring, plug-and-play deployment
- Sleek, low-profile design blends into any environment

HP 1820-24G-POE+ Switch

- 24 x Auto Sensing Gigabit Ethernet Ports
- ARM Cortex-A9 400 MHz Processor
- 128MB SDRAM
- 16MB Flash Memory
- 1.5MB Packet Buffer Size
- 8,000 MAC Address Table Size
- 52 Gbps Switching Capacity
- Up to 38.6 Mpps Throughput

4. **Describe the linkage between the district's District Instructional Technology Plan and the proposed projects. (There should be a link between your response to this question and your response to Question 1 in Part E. Curriculum and Instruction "What are the district's plans to use digital connectivity and technology to improve teaching and learning?")**

Increasing our infrastructure, speed, security, reliability and access for students and staff will provide further opportunities for learning to research and analyze information that develops higher order thinking skills, increases problem solving skills, and supports student/Staff confidence in using technology skills needed for success now and in the future. The projects involved in this proposal will allow students better access and less disruption via interrupted access. One of the major contributions to this goal is the Meraki access points. This will increase the usage and support our one to one initiative.

5. **If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand.**

Please describe how you have quantified this demand and how you plan to meet this demand.

The district currently has a 10/1 Mbps connection. Due to this "slow" connection users experience significant difficulty assessing information and maintaining solid connections. This can especially seen during times of upload with only 1 Mbps which results in much slower or nonexistent downloads. Furthermore, the district currently has many areas with weak connectivity or no connectivity at all. So, In order to meet the demand of a robust network with sufficient bandwidth the district will be upgrading its internet access to 25/25 Mbps fall of 2017 and installing a firewall/gateway with antivirus content filter. Additionally, 15 wireless AP's and switches will be installed to ensure seamless connectivity that will effectively cover the entire school campus. We currently have 78 students which requires 7.8 Mbps. We have 10.0 Mbps thus exceeding the requirement. Our current access points are not sufficient for the number of devices that we have. The Meraki access points located throughout the building will accommodate the increased wireless usage thus enhancing technology use and effectiveness for staff and students throughout the building.

6. **As indicated on Page 5 of the guidance, the Office of Facilities Planning will have to conduct a preliminary review of all capital projects, including connectivity projects.**

Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
52-06-01-08-0-001-BA1
(No Response)

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

School Connectivity

Page Last Modified: 11/08/2018

- 7. **Certain high-tech security and connectivity infrastructure projects may be eligible for an expedited review process as determined by the Office of Facilities Planning.**

Was your project deemed eligible for streamlined review?

Yes

- 7a. **Districts that choose the Streamlined Review Process will be required to certify that they have reviewed all installations with their licensed architect or engineer of record and provide that person's name and license number. The licensed professional must review the products and proposed method of installation prior to implementation and review the work during and after completion in order to affirm that the work was code-compliant, if requested.**

I certify that I have reviewed all installations with a licensed architect or engineer of record.

- 8. **Include the name and license number of the architect or engineer of record.**

Name	License Number
Garrett Hamlin	30484
(No Response)	(No Response)

- 9. **If you are submitting an allocation for School Connectivity complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.**

	Sub-Allocation
Network/Access Costs	19,153
Outside Plant Costs	0
School Internal Connections and Components	1,839
Professional Services	0
Testing	0
Other Upfront Costs	0
Other Costs	0
Totals:	20,992

- 10. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be eligible for tax-exempt financing to be reimbursed through the SSBA. Sufficient detail must be provided so that we can verify this is the case. If you have any questions, please contact us directly through smartschools@nysed.gov. NOTE: Wireless Access Points should be included in this category, not under Classroom Educational Technology, except those that will be loaned/purchased for nonpublic schools. Add rows under each sub-category for additional items, as needed.**

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	Meraki MR Enterprise Cloud Controller	15	317	4,755

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

School Connectivity

Page Last Modified: 11/08/2018

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
	& access point License			
Connections/Components	Spectrum One time installation fee 25MbpsX 25Mbps Internet Installation May need a new box as well	1	250	250
Network/Access Costs	Network POE Switch	1	469	469
Network/Access Costs	WAPS Meraki MR33	15	458	6,870
Connections/Components	Tripp Lite Cat 6 Cable 1000'	1	433	433
Connections/Components	Tripp Lite Cat6 RJ45 Modular Connector Plug	1	74	74
Connections/Components	Black Box CAT6 Installation Kit - Network tool/tester kit	1	474	474
Connections/Components	Tripp Lite 24-Port Cat6 Cat5 Patch Panel Feed Through Rackmount 568A/B RJ45 1URM TAA - Patch panel - black - 1U - 19	1	354	354
Connections/Components	Tripp Lite Cat6/Cat5e 110 Style Punch Down Keystone Jack - 1 Port RJ45 Blue - N238-001-BL	1	14	14
Network/Access Costs	PowerEdge R430 Rack Server	1	3,841	3,841
Connections/Components	Tripp Lite's 13U 4-Post Open Frame Rack	1	240	240
Network/Access Costs	APC BR1500G Back-UPS XS LCD 1500 VA UPS battery Back-up Master control, 1500 VA, 10-outlet, 120V- BR15006	4	182	728
Network/Access Costs	Emerson's Liebert External 3000VA UPS - AC 120 V, 2700 Watt, 3000 VA 9 Ah, RS-232, USB, 6 Output Connectors, PFC, 2U Rack-Mountable - GXT4-3000RT120 Item#: 13374823 ' Model#: GXT4-3000RT120	1	2,490	2,490

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

1. **In order for students and faculty to receive the maximum benefit from the technology made available under the Smart Schools Bond Act, their school buildings must possess sufficient connectivity infrastructure to ensure that devices can be used during the school day. Smart Schools Investment Plans must demonstrate that sufficient infrastructure that meets the Federal Communications Commission’s 100 Mbps per 1,000 students standard currently exists in the buildings where new devices will be deployed, or is a planned use of a portion of Smart Schools Bond Act funds, or is under development through another funding source. Smart Schools Bond Act funds used for technology infrastructure or classroom technology investments must increase the number of school buildings that meet or exceed the minimum speed standard of 100 Mbps per 1,000 students and staff within 12 months. This standard may be met on either a contracted 24/7 firm service or a "burstable" capability. If the standard is met under the burstable criteria, it must be:**
 1. Specifically codified in a service contract with a provider, and
 2. Guaranteed to be available to all students and devices as needed, particularly during periods of high demand, such as computer-based testing (CBT) periods.

Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

We have surpassed the need of 100 Mbps per 1,000 students since our need is 7.8 and we currently have a speed of 10 Mbps and will be upgrading to 25 Mbps in the Fall of 2019.

- 1a. **If a district believes that it will be impossible to meet this standard within 12 months, it may apply for a waiver of this requirement, as described on the Smart Schools website. The waiver must be filed and approved by SED prior to submitting this survey.**

By checking this box, you are certifying that the school district has an approved waiver of this requirement on file with the New York State Education Department.

2. **Connectivity Speed Calculator (Required)**

	Number of Students	Multiply by 100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	Current Speed in Mb	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	78	7,800	7.8	10	25	Currently Met

3. **If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand. Please describe how you have quantified this demand and how you plan to meet this demand.**

This is also addressed under school connectivity. Through in-house discussions and trouble shooting, it is evident that the current access points are just not sufficient for the number of devices that we have. (1 to 1). This increased usage requires us to have a high density solution and we believe the switches and Meraki access points will accommodate our needs for students and staff.

In order to achieve effective high-speed broad-band and wireless connectivity, it is necessary to update all existing wiring and/or wireless access points. This will include installing aa patch panel to accommodate AP's and hardwired devices with additional slots for future expansion. (There will be no new wiring just updating of existing.)

Installing a wall mount rack to hold patch panel, switches, firewall and other equipment.

Updating our Firewall/Gateway/Antivirus Content Filter -all- in-one

Switches: 1-24 port POE switch to accommodate hardware devices

1-48 port Non-POE switch to accommodate hardware drives

15 Wireless POE AP's

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

4. **All New York State public school districts are required to complete and submit an Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. Districts that include educational technology purchases as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department.**

By checking this box, you are certifying that the school district has an approved Instructional Technology Plan survey on file with the New York State Education Department.

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

5. **Describe the devices you intend to purchase and their compatibility with existing or planned platforms or systems. Specifically address the adequacy of each facility's electrical, HVAC and other infrastructure necessary to install and support the operation of the planned technology.**

The building electrical infrastructure is more than capable to support any and all listed devices. The building HVAC and electrical system meet SED guidelines for student occupied instructional area. All heating and cooling systems are comprised of filtration system to ensure indoor air quality.

ClearTouch 70" PANEL SPECIFICATIONS

- 3840 x 2160 Full HD max resolution
- 60Hz refresh panel rate
- Display area of 60.59 x 34.08
- 8ms response time
- Brightness of 330 cd/m2
- VESA size of 600 mm x 400 mm

PANEL CONNECTIONS

- 2 HDMI 1.4 inputs
- 1 HDMI 2.0 input

PANEL POWER

- Power consumption of 300W

PANEL DIMENSIONS & WEIGHT

- Product size: 64.49 x 38.66 x 3.86
- Shipping size: 70.98 x 9.57 x 45.67
- Product weight: 123.46 lbs
- Shipping weight: 149.91 lbs

PANEL ACCESSORIES

- Compatible with all accessories

ClearTouch 86" PANEL SPECIFICATIONS

PANEL SPECIFICATIONS

- 3840 x 2160 Full HD max resolution
- 60Hz refresh panel rate
- Display area of 74.61 x 41.97
- 8ms response time
- Brightness of 330 cd/m2
- VESA size of 800 mm x 600 mm

PANEL CONNECTIONS

- 2 HDMI 1.4 inputs
- 1 HDMI 2.0 input

PANEL POWER

- Power consumption of 500W

PANEL DIMENSIONS & WEIGHT

- Product size: 78.27 x 46.38 x 3.92
- Shipping size: 87.05 x 11.02 x 53.94
- Product weight: 171.96 lbs
- Shipping weight: 231.49 lbs

PANEL ACCESSORIES

- Compatible with all accessories

Fixed Mobile Stand

6000U SERIES COMPATIBILITY

- Supports 55"-86" Clear Touch Interactive panels

FEATURES

- Strong and sturdy, supporting up to 300 lbs
- Convenient shelving for your other devices
- Three different height settings for different applications

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

DIMENSIONS & WEIGHT

- Product weight: 81 lbs
- Shipping weight: 99 lbs
- Shipping dimensions: 60 x 26 x 5

WARRANTY

- 90 day replacement

Convertible Mobile Stand**CTI-MOUNT-CONM****6000U SERIES COMPATIBILITY**

- Supports 55"–86" Clear Touch Interactive panels

FEATURES

- Electrical powered stand makes adjustments simple
- Has a quiet electrical motor
- Tapered base provides greater accessibility for all users
- Fully adjustable height & tilt
- Optional shelf available (pictured; mouse and keyboard not included)

DIMENSIONS & WEIGHT

- Product weight: 161 lbs
- Shipping weight: 170 lbs
- Shipping dimensions (3 boxes):
- CTI-STAND-MCCM: 32.3 x 10.6 x 8.7
- CTI-MOUNT-TADM: 35.0 x 30.3 x 18.9
- CTI-STAND-MBBL: 53.1 x 30.7 x 4.7

WARRANTY

- 5 year limited replacement warranty for the motor

Chromebooks

Name / Model Number Samsung XE500C13-K01US CHROMEBOOK 3 (4 GB) Operating System Google Chrome Processor / Chipset Intel® Celeron® Processor N3050 (1.60 GHz up to 2.16 GHz 2 MB L2 Cache) Graphic Intel® HD Graphics Display 11.6" HD LED Display (1366 x 768), 16:9, Anti-Reflective Touchpad Multi-Gesture Support Memory 1 2GB LPDDR3 Memory at 1600MHz 4GB LPDDR3 Memory at 1600MHz Hard Drive 2 16GB e.MMC iNAND™ Embedded Flash Drive Color Metallic Black Internal Digital Mic Yes Speaker Stereo Speakers (1.5W x 2) Web Camera 720p HD Network 802.11 AC (2 x 2) Bluetooth Bluetooth 4.0 Headphone Out / Microphone In Yes (Headphone Out / Mic Combo) Ports DC-In, 1 x USB 2.0 + 1 x USB 3.0 Multi Card Slot 1 Micro SD Multimedia Card Reader HDMI Yes Input Clickpad, Island-type Keyboard Power 26W AC Adapter, 33Wh Battery Life 3 Up to 11 Hours Security TPM (Trusted Platform Module) Warranty 1 Year Standard Parts and Labor Dimensions (L x W x H) 11.37" x 8.04" x 0.70" Weight 2.54 lbs.

Interactive whiteboards and chrome books will integrate with existing platforms and systems. All infrastructure will be more than adequate once this project is completed and our connectivity is upgraded with Time Warner. We also have a generator for back up power in the event of a power outage.

Apple iPads

Apple · iPad Family · iPad · iOS · 9.7 in screen · 2048 x 1536 · 10 hour battery · 16.5 oz · 32 GB Storage. Additional specifications upon request.

Original Prusa i3 MK2S 3D printer

- 31% bigger build volume – 10500 cm³ (25 x 21 x 20 cm or 9,84 x 8,3 x 8 in)
- Open frame design for easy use
- Integrated LCD and SD card controller (8GB included)
- Up to 40% faster printing thanks to the genuine E3D V6 Full hotend
- 0,4mm nozzle (easily changeable) for 1,75 mm filament
- Layer height from **0,05 mm**
- Automatic mesh bed levelling
- Heatbed with cold corners compensation – for warpless 3D printing from any material
- Hassle free PEI print surface - no glass, no glue, no ABS juice
- Supported materials – PLA, ABS, PET, HIPS, Flex PP, Ninjaflex, Laywood, Laybrick, Nylon, Bamboofill, Bronzefill, ASA, T-Glase, Carbon-fibers enhanced filaments, Polycarbonates...
- Easy multicolor printing based on layer height

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

- 1 kg (2 lbs) PLA filament included
 - Average power consumption 70 W (printing PLA) or 110 W (printing ABS), exterior dimensions 42 x 42 x 38 cm (16.5 x 16.5 x 15 inches), weight 6,5 kg (14 lbs), CE certification
 - Specially optimized firmware for quiet printing
- Original Prusa i3 MK2S 3D printer (Filamint)**
- 220 °C - 240 °C printing temperature 1)
 - 80 °C - 100 °C heated bed temperature
 - 3 mm filament is actually manufactured with diameter of 2.85 mm +- 0.05 mm as is common standard.
 - 1.75 mm filament is manufactured with precision of +- 0.05 mm

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

6. Describe how the proposed technology purchases will:
- > enhance differentiated instruction;
 - > expand student learning inside and outside the classroom;
 - > benefit students with disabilities and English language learners; and
 - > contribute to the reduction of other learning gaps that have been identified within the district.

The expectation is that districts will place a priority on addressing the needs of students who struggle to succeed in a rigorous curriculum. Responses in this section should specifically address this concern and align with the district's Instructional Technology Plan (in particular Question 2 of E. Curriculum and Instruction: "Does the district's instructional technology plan address the needs of students with disabilities to ensure equitable access to instruction, materials and assessments?" and Question 3 of the same section: "Does the district's instructional technology plan address the provision of assistive technology specifically for students with disabilities to ensure access to and participation in the general curriculum?"

The 2004 Individuals with Disabilities Education Act (IDEA) requires that districts provide assistive technology to all students with disabilities if it is needed for them to receive a free appropriate public education (FAPE). The Individualized Education Program (IEP) Team is charged with the responsibility for determining a student's individual need for assistive technology in order to benefit from his or her special education and to have access to the general curriculum. If it is determined that assistive technology devices and/or services are necessary, the IEP must specify the devices and services. The range of recommendations can be very broad and can include both low-tech solutions and the use of more complex forms of technology. For example, a student with a fine motor difficulty may need a larger than standard pencil or may need to use a special keyboard, whereas a student who is unable to speak may need an augmentative communication device. The plan incorporates a variety of assistive technologies for students with disabilities. Assistive technology ranges from low- to high-tech and is used to support learning and to bypass challenging tasks (such as handwriting). In order to be effective, assistive technology needs to be embedded within quality instruction. These include but are not limited to: laptops, tablets, software supports, computer assisted instruction, digital books, text to speech, speech to text and graphic organizers. It is understood that the technology considerations are a universal design for learning (for all students including those with disabilities). The Edinburg Common School District is responsible for the assistive technology needs of the students with disabilities served in both general and special education classrooms. It is important to keep in mind that providing assistive technology is not simply a matter of purchasing devices. There are many factors that need to be examined when assistive technology devices and services are being considered for a student—including educational goals, personal preferences, social needs, environmental realities, and practical concerns. Also critical are the various services that will support the student's use of assistive technology. These services can include customizing a device, maintaining or repairing the device, and providing training and technical support. In addition, training may be needed not only for the student but for any family members and teachers who may assist the student. It is important that these services be considered, planned, and documented at the time of the evaluation. Finally, evaluation should be an ongoing process. Assistive technology devices and strategies should be constantly reviewed to ensure that they are meeting the changing needs of the student. In Edinburg we understand that technology can be used to close learning gaps for our ELLS, SWDS and at risk students as well as enhance differentiated instruction. Technology provides interactive learning and the ability to explore and create rather than to "drill and kill". Professional development is needed to support our teachers in utilizing the technology to engage their students. With the help of the Smart Bond monies we hope to support all of our students(including students identified as at risk, ELLs and SWDs) with the following pieces: • One to one devices (chromebooks or I-Pads) Technology access ensuring that speedy internet connections are available • Technology usage designed to promote high levels of interactivity and engagement and make data available in multiple forms • Curriculum and instruction plans enabling students to use technology to create content as well as learn material • Providing professional learning opportunities for teachers on how to use the technology and pedagogies that are recommended, including technical assistance to help educators manage the hardware, software and connections to the Internet

Interactive whiteboards, Tablets, I-Pads and chrome books are an integral part of the instruction at Edinburg Common School. Technology integration is the core of our movement toward project based learning and differentiated instruction for students. The capabilities in Special Education, Regular Education and with English Language learners for text read, highlighting, creating innovative projects and presentations is dependent on the level of technology we are able to offer and support. Our autistic students and students with sensory integration concerns will benefit greatly from the interactive whiteboards as that are able to participate in activities that promote movement, sound and engagement. The programs, apps and possibilities for all students is limitless with one to one devices and interactive whiteboards in every learning space.

1. Interactive Whiteboard and Mounts- ClearTouch 70" PANEL SPECIFICATIONS- Interactive whiteboards will become the hub of education in our classrooms. Each ClearTouch panel allow for up to 20 simultaneous points of touch, immediate access to mobile apps and software, device mirroring, and wireless connectivity. These features and more will enable our students to quickly collaborate, in real-time. The ClearTouch mounts will allow for infinite classroom layouts in order to provide students with the ever changing depends dictated by various learning styles and needs.

2. Chromebooks- Samsung XE500C13-K01US- Because of the lowcost of a Chromebook the district will be able to achieve a 1 to 1 ratio.

Furthermore, students will benefit due to the inherently secure nature of the ChromeOS. The ChromeOS is primarily cloud based, built to run on only a web browser, with no computer installation. This will enable to work from home with no additional cost. Chromebooks do not require antiviral

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1Classroom Learning Technology

Page Last Modified: 11/08/2018

software nor do they require encryption as only identified users can gain access. Also Chromebooks are easy to use for all students, facilitate collaboration, and allow for unlimited users and uses in education. Finally, a plethora of educational apps provide students with differentiated instruction while closing learning gaps with web-based applications and self-adapting learning/assessment tools.

3. iPads- The advantages of iPads in the classroom run deep. To begin Apple iPads meet students at their comfort level. Most students have already used some type of tablet before even entering school. iPads provide immediate learner feedback to both the student and teacher and allow for full-class participation. Both files and data are electronically stored for easy retrieval in the future and or collaboration with others. iPads will reduce the need for hard copies and even enable students to access books and classwork at both school and home. The Apple App Store contains a multitude of apps that will allow for both learning inside and outside of the classroom while providing differentiated instruction opportunities with both web-based programs and assessment tools enabling the teacher to quickly identify learning gaps and provide data driven instruction.

4. 3D Printer- Original Prusa i3 MK2S 3D printer- All students throughout the building will have access to one of the leading 3D printers. The Prusa i3 MK2S 3D printer has an open source design which allows for both innovation and cooperation. Students will now be able to turn their ideas from various areas of the curriculum into reality.

5. Battery Backups- The need for uninterrupted power supplies will be crucial in maintaining both the integrity of student data as well as providing stable network connectivity.

7. Where appropriate, describe how the proposed technology purchases will enhance ongoing communication with parents and other stakeholders and help the district facilitate technology-based regional partnerships, including distance learning and other efforts.

Using Google Classroom will enhance the communication between teacher and student, student and home and teacher at home. As already proven in our sixth grade classroom this format really enhances ongoing communication and facilitates technology-based partnerships between the classroom and the home. Being able to communicate with students in school and from home enhances the learning even when a student is absent from school.

Parent-Teacher communication is increased through the use of on-line plan and grade books, e-mails, shared calendars, websites, homework posts, this allows parents to have instant access and communication which allows students to praise, guide and intervene much more quickly and be involved with their child's education and with the teacher.

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

8. Describe the district's plan to provide professional development to ensure that administrators, teachers and staff can employ the technology purchased to enhance instruction successfully.

Note: This response should be aligned and expanded upon in accordance with your district's response to Question 1 of F. Professional Development of your Instructional Technology Plan: "Please provide a summary of professional development offered to teachers and staff, for the time period covered by this plan, to support technology to enhance teaching and learning. Please include topics, audience and method of delivery within your summary."

As per the NY State Certified Instructional Technology Plan, our in-house three year technology plan (2014-2018) and staff needs assessment, we are able to identify training needs of our employees. In addition to HFM BOCES technology offerings, staff at ECS will be offered the following PK-8 professional development including "developing multiple computer-training sessions each year to build computer knowledge and skill." Specific areas of focus: Maker space, additional chrome book training, Data analysis, Technology integration across the curriculum, Clear Touch training, I-Pads for young students, Google Classroom, Planbook.com, Ed Vistas for evaluation, Data Analysis tools for Chrome book as well as use of audio-visual equipment for recording and self-evaluating teaching abilities.

All teachers and paraprofessionals will be given Professional Development based on the NYS PD standards as follows:

Data based training based on needs assessments to improve content knowledge and quality teaching and planning

Provide safe, effective learning environments and improve student behavior and classroom management

Provide opportunities to build partnerships and communication with families and community

Provide differentiation and additional supports and opportunities for students

Monitor student progress

Staff will also receive training on a variety of platforms, websites and software to be used in their classrooms with their students for enrichment, differentiation and also progress monitoring. All of our trainings are aligned to our long range plan instructional goals and are measured for effectiveness. A primary upcoming action plan involves further integration of technology across all content areas. The Technology plan is reviewed annually and updated as needed.

Our Technology plan is on-going process and we will continue to monitor, update and adjust our plan to support our goals and needs of students and staff. The Technology team will continue to meet and to address and analyze any developments or concerns.

Professional Development will be assessed using multiple sources of information and completing the on-going annual PD evaluation tool from NYSED.

9. Districts must contact the SUNY/CUNY teacher preparation program that supplies the largest number of the district's new teachers to request advice on innovative uses and best practices at the intersection of pedagogy and educational technology.

By checking this box, you certify that you have contacted the SUNY/CUNY teacher preparation program that supplies the largest number of your new teachers to request advice on these issues.

- 9a. Please enter the name of the SUNY or CUNY Institution that you contacted.

SUNY Plattsburg

- 9b. Enter the primary Institution phone number.

518-564-3140

- 9c. Enter the name of the contact person with whom you consulted and/or will be collaborating with on innovative uses of technology and best practices.

Harry Brooks

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

- 10. A district whose Smart Schools Investment Plan proposes the purchase of technology devices and other hardware must account for nonpublic schools in the district.

Are there nonpublic schools within your school district?

- Yes
- No

- 11. Nonpublic Classroom Technology Loan Calculator

The Smart Schools Bond Act provides that any Classroom Learning Technology purchases made using Smart Schools funds shall be lent, upon request, to nonpublic schools in the district. However, no school district shall be required to loan technology in amounts greater than the total obtained and spent on technology pursuant to the Smart Schools Bond Act and the value of such loan may not exceed the total of \$250 multiplied by the nonpublic school enrollment in the base year at the time of enactment.

See:

http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf.

	1. Classroom Technology Sub-allocation	2. Public Enrollment (2014-15)	3. Nonpublic Enrollment (2014-15)	4. Sum of Public and Nonpublic Enrollment	5. Total Per Pupil Sub-allocation	6. Total Nonpublic Loan Amount
Calculated Nonpublic Loan Amount	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

- 12. To ensure the sustainability of technology purchases made with Smart Schools funds, districts must demonstrate a long-term plan to maintain and replace technology purchases supported by Smart Schools Bond Act funds. This sustainability plan shall demonstrate a district's capacity to support recurring costs of use that are ineligible for Smart Schools Bond Act funding such as device maintenance, technical support, Internet and wireless fees, maintenance of hotspots, staff professional development, building maintenance and the replacement of incidental items. Further, such a sustainability plan shall include a long-term plan for the replacement of purchased devices and equipment at the end of their useful life with other funding sources.

By checking this box, you certify that the district has a sustainability plan as described above.

- 13. Districts must ensure that devices purchased with Smart Schools Bond funds will be distributed, prepared for use, maintained and supported appropriately. Districts must maintain detailed device inventories in accordance with generally accepted accounting principles.

By checking this box, you certify that the district has a distribution and inventory management plan and system in place.

- 14. If you are submitting an allocation for Classroom Learning Technology complete this table.

Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Interactive Whiteboards	50,352
Computer Servers	0
Desktop Computers	0
Laptop Computers	5,040
Tablet Computers	4,935
Other Costs	3,131
Totals:	63,458

Smart Schools Investment Plan - 2016-17 Version (Original) - Round 1

Classroom Learning Technology

Page Last Modified: 11/08/2018

15. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov.

Please specify in the "Item to be Purchased" field which specific expenditures and items are planned to meet the district's nonpublic loan requirement, if applicable.

NOTE: Wireless Access Points that will be loaned/purchased for nonpublic schools should ONLY be included in this category, not under School Connectivity, where public school districts would list them.

Add rows under each sub-category for additional items, as needed.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Interactive Whiteboards	Clear Touch 70	7	4,599	32,193
Interactive Whiteboards	Fixed Mobile Stand	6	535	3,210
Interactive Whiteboards	Convertible Mobile Stand	2	2,225	4,450
Laptop Computers	XE500C13-K02US Chromebook 3 11.6	28	180	5,040
Tablet Computers	iPad Wi-Fi 32GB	15	329	4,935
Other Costs	Original Prusa i3 MK2S 3D printer	3	899	2,697
Other Costs	Easy ABS filamint	13	30	390
Other Costs	Easy ABS filamint	2	22	44
Interactive Whiteboards	ClearTouch 86	1	10,499	10,499