### Smart Schools Investment Plan - Byram 2016 SSBA App

SSIP Overview

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### Group 1

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

Andrew Taylor

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

9142734250

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

ataylor@byramhills.org

2. Please indicate below whether this is the first submission, a new or supplemental submission or an amended submission of a 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
- ☑ 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
- 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 occured 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.

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# Smart Schools Investment Plan - Byram 2016 SSBA App

SSIP Overview

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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.

Byram Hills Preliminary Investment Plan.pdf ByramHillsSmartSchoolsInvestmentPlan.pdf 94PanelsQuote.pdf ActivPanel Specification Sheet - EN.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.byramhills.org/departments.cfm?subpage=1339

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.

2,538

- 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:

\$333,850

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.

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# Smart Schools Investment Plan - Byram 2016 SSBA App

SSIP Overview

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	Sub- Allocations
School Connectivity	0
Connectivity Projects for Communities	0
Classroom Technology	333,850
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	333,850

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# Smart Schools Investment Plan - Byram 2016 SSBA App

**School Connectivity** 

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### Group 1

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.

(No Response)

- 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	100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	Current Speed in Mb	Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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

(No Response)

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?)

(No Response)

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# Smart Schools Investment Plan - Byram 2016 SSBA App

School Connectivity

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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.

(No Response)

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	
(No Response)	

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?

(No Response)

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

Name	License Number
(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	(No Response)
Outside Plant Costs	(No Response)
School Internal Connections and Components	(No Response)
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
Totals:	0

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# Smart Schools Investment Plan - Byram 2016 SSBA App

School Connectivity

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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	Item to be purchased	Quantity	Cost per Item	Total Cost
each type.				
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Community Connectivity (Broadband and Wireless)

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#### Group 1

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

(No Response)

Please describe how the proposed project(s) will promote student achievement and increase student and/or staff
access to the Internet in a manner that enhances student learning and/or instruction outside of the school day
and/or school building.

(No Response)

- Community connectivity projects must comply with all the necessary local building codes and regulations (building and related permits are not required prior to plan submission).
  - ☐ I certify that we will comply with all the necessary local building codes and regulations.
- 4. Please describe the physical location of the proposed investment.

(No Response)

5. Please provide the initial list of partners participating in the Community Connectivity Broadband Project, along with their Federal Tax Identification (Employer Identification) number.

Project Partners	Federal ID #
(No Response)	(No Response)

6. If you are submitting an allocation for Community 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.

Totals:	0
Other Costs	(No Response)
Other Upfront Costs	(No Response)
Testing	(No Response)
Professional Services	(No Response)
Customer Premises Equipment	(No Response)
Tower Costs	(No Response)
Outside Plant Costs	(No Response)
Network/Access Costs	(No Response)
	Sub-Allocation

7. 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.

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

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Community Connectivity (Broadband and Wireless)

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Select the allowable expenditure	Item to be purchased	Quantity	Cost per Item	Total Cost
type.				
Repeat to add another item under				
each type.				
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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#### Questions

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.

Byram Hills CSD currently has 2,538 Students. Based on our current enrollment we would need 253.8 Mbps to meet the Smart Schools Bond Act Minimum Standard. Byram Hills CSD currently subscribe to 400Mbps through the Lower Hudson Regional Information Center (LHRIC). This exceeds the minimum standard.

Byram Hills CSD has a 10 Gbps connection between buildings and a 1 Gbps connections to the LHRIC. Our bandwidth can be throttled up to 1 Gbps at any time. The bandwidth and network is continuously monitored to insure continuity and quality of service to all users. We piloted CBT last school year and did not have any issues with connectivity or bandwidth. We regularly have a high volume of users (500+ users or over 20% of our students simultaneous online) on the system and have not peaked our bandwidth.

- 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)

		100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	in Mb	Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	2,538	253,800	253.8	400	500	Met

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### Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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 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 has up to date wired and wireless access in 100% of its instructional, administrative and common spaces. The district currently maintains a 1:1 Chromebook program for grades 3-12 and has a 1:2 program for grades K-2. Wireless access and broadband are continuously monitored to insure quality of service for all stakeholders. The district has both a secure network and guest network for a BYO device program in grades 3-12. Community and parents are able to take advantage of the guest network and district functions.

Byram Hills CSD currently has 2,538 Students. Based on our current enrollment we would need 253.8 Mbps to meet the Smart Schools Bond Act Minimum Standard. Byram Hills CSD currently subscribe to 400Mbps through our LHRIC. This exceeds the minimum standard. Byram Hills CSD has a 10 Gbps connection between buildings and a 1 Gbps connections to the LHRIC. Our bandwidth can be throttled up to 1 Gbps at any time. The bandwidth and network is continuously monitored to insure continuity and quality of service to all users. We piloted CBT last school year and did not have any issues. We regularly have a high volume of users on the system and rarely peak our bandwidth.

- 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.

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### Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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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.

It was determined during the Technology Plan development process that an upgrade of the district's aging (10+ year old) and failing Smartboards was needed. Because we are upgrading hardware that is currently installed the electric and net work needed is already available in each room. The Director of Technology, working with the Building Technology Coordinators, vetted a number of interactive whiteboard alternatives. Three options were chosen to pilot in each building. Feedback was gathered by the Learning Community Facilitators and regular building meetings throughout the process. A survey was given to all staff and based on the feedback the Promethean 70" LED ActivePanel with ActivInspire and Classflow software was chosen. Some of the primary reasons are:

- · Ability to import SMART files
- · Cost effectiveness
- Better hardware (number of ports, anti glare, etc.)
- Better software (ActivInspire and ClassFlow)
- · Excellent user experience and low learning curve
- Wireless presentation box allows for mobile presentation options
- · Classflow software allows us to leverage our 1:1 Chromebooks and online content

The District plans will be purchasing 94 Promethean ActivPanels with SSBA Funds and district funds. Additionally, 20 Board have already been purchased with district funds and are being installed Fall 2016. The Promethean ActivPanel delivers incredible full HD picture quality, powerful interactive software and an intuitive touchscreen to create a truly engaging learning experience. The ActivPanel reveals brilliant colors and crisp details to boost readability ensuring the best learning experience for students. Users can actively participate in lessons at the display with just a swipe, pinch or zoom. The intuitive interface makes the experience natural whether you're writing with the digital pen or using multi-touch gestures. The all-new Promethean ActivPanel is a tablet-like surface for the front of the classroom. Powered by Promethean's ActivConnect Android processor, it enhances the teaching and learning experience providing instant access to educational apps, wireless connectivity, mobile device mirroring and more. Access the vast, ever-expanding world of over 500,000 educational apps. Easily download your favorite apps directly from your home screen. Ability to Connect Bluetooth devices such as musical keyboards, digital lab sensors, and droids/robots to the ActivPanel in support of STEM/STEAM Education. Able to Mirror mobile devices to the ActivPanel to share content. Additionally, you can create, save, and share digital notes with the entire class. Access your apps with ease, switch between applications, or customize the home page. ActivPanel's user interface is designed to make learning fun and engaging.

Attached is additional product information.

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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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 Promethean ActivBoard has a number of benefits to students in the classroom. Research shows the impact such a device can make and it supports our current instructional mode. The benefit is good for all students and will be available in all classrooms.

**Research:** Study results indicated that, in general, using interactive whiteboards and whole class collaboration hardware/software was associated with a 16 percentile point gain in student achievement. Three features have a statistically significant relationship with effects interactive boards have on student achievement.

- 1. Individual student devices to allow student response. We use Chromebooks as our individual devices. Using devices to assess students and allow them to provide feedback was associated with a 26 percentile point gain in student achievement.
- 2. Use of graphics and other visuals to represent complex information. Use of these aids was also associated with a 26 percentile point gain in student achievement.
- 3. Use of applications or signal that demonstrates an answer is correct or to present information in an unusual context. For example dragging and dropping correct answers into specific locations, acknowledging correct answers with virtual applause, and uncovering information hidden under objects. These practices were associated with a 31 percentile point gain in student achievement. (Marzano)

**Learning environment:** Interactive whiteboards are an effective way to interact with digital content and multimedia in a classroom learning environment. Learning activities with an interactive whiteboard may include, but are not limited to the following:

- · Showing applications
- · Manipulating text, images, media, and interactive content
- · Showing student work and screens
- Making notes in digital ink and saving later review by students
- Viewing online content as a group
- · Creating digital lesson activities with templates, images and multimedia
- Using presentation tools that are included with the whiteboarding software
- · Student presentations

**Instructional Approach:** Our district supports a variety of education theories that are grounded in the notion of the social learner and position student engagement in knowledge construction. The interactive whiteboards support the 4 underlying theories of social learning:

- Problem Based Learning: The learners explore meaning and context by solving authentic and real world problems.
- Active learning: The learners are actively engage in the learning process through reading, writing, discussion, analysis, synthesis and evaluation, rather than passively absorbing instruction.
- · Constructivism: The learner selects and transform information, build hypotheses in order to make decisions and ultimately construct meaning.
- · Whole-class teaching: The entire class together, focuses their attention and provides structured, teacher-focused group interaction.

Motivation is a key to student's drive and level of participation in the learning process. Some students are intrinsically motivated to learn because they are driven to understand through reflection and enjoy participating in learning activities. Others are extrinsically motivated by enticements, rewards or teacher-defined objectives. Interactive whiteboards appeal to both intrinsically and extrinsically motivated students. Intrinsically motivated students volunteer to dem-onstrate knowledge on the interactive whiteboard in front of their peers as a means of showcasing individual achievement. Extrinsically motivated students are enticed by the "wow factor" of the technology and are motivated learners as a result of the enjoyment they experience from using the product. (SMART)

The benefits of an interactive whiteboard on teaching and learning are multiplied for students with a disability. Blossom Learning developed an info section contains details about how certain features of an interactive whiteboard, along with other associated classroom technology products, can help students that have certain types of special learning needs. This included visual, audio, mobility, and cognitive disabilities. The benefit varies based on

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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disability and approach. (Bloom)

The Promethean ActivBoard will help us to reduce the gap between individual and whole group work seamlessly in the classroom. It will provide the learning supports needed to be successful in a 21st century classroom.

#### Benefits for Students with Special Needs and English Language Learners

As the demands on education's increases, it is becoming more difficult for teachers to accommodate the needs of students with a disability and English Language Learners (ELL) while continuing to meet the needs of the rest of the class. Providing mobile interactive whiteboards to students offers differentiated access to general education curriculum by allowing students to engage with the content. The following is revised from "Interactive Whiteboard Technology: Strategies for Special Needs Students" prepared by Accessibility Partners, LLC. Disability and Accessibility Consultants. Interactive whiteboards provide a multi sensory approach that integrates visual, auditory, touch and movement into the learning environment give educators the interactivity needed to provide engaging lessons to students with a disability and ELLs. For instance, lessons can be completed by using sounds, videos and images that are much more interactive and engaging than in a flat, two-dimensional display of a textbook or blackboard. Digital manipulative tools are critical for hands-on and multi-sensory learning and support repetition of core concepts. Highlighter, curtain, and spotlight tools allow for an emphasis on major points and enhance contrast. Various font options and the magnifier tool optimize the print size/type for students with visual impairments. Freehand shape and freehand text tools reinforce fine motor skill development for those with a dexterity disability. Note taking for review of key concepts and recorded assignments that can be used to review lesson content and be saved, printed and taken home for additional reinforcement. Audio or video supplements make information more accessible for emerging readers and ELL students. Copies of board work and student/teacher notes can be captured and shared across the classroom or taken home for additional practice and review. Mobile Interactive Whiteboard Accommodations by Disability The capabilities of mobile interactive whiteboards can be accessed in a variety of ways for students with a variety of disabilities and ELLs. Below are some categories outlined in a white paper prepared by Accessibility Partners, LLC. Disability and Accessibility Consultants on the unique functions interactive whiteboards play in teaching students with disability and ELLs. Physical disabilities:

- · Low vision high contrast and font size can be changed
- Blind Notes can be printed and used to translate into
- Braille Deaf or hearing impaired captioning for multimedia presentation, notes can be captured and printed for hearing impaired students who has
  difficulty taking notes while trying to read lips or sign language
- · Mobility challenged -works from the desk wheelchair accessible to both students and educators using wheelchairs
- Temporary disability or medical illness allows students to catch up or go at a slower pace

Learning disabilities:

- · Ability to remediate, review and reinforce learning
- · Adjust pace to meet individual needs
- · Contrast and font adjustments Increased interactivity leading to a greater ability to engage
- Individual and small group participation peer teaching

Cognitive disabilities:

- · Increased interactivity leading to a greater ability to engage
- Small group participation
- Adjust pace to meet individual needs
- · Engagement leads to longer focus on tasks
- · Extending learning beyond the classroom

English as a Second Language:

- · Ability to remediate and review
- · Adjust pace to meet individual needs
- · Small group participation
- Online continuation of learning

## (http://web.norman.k12.ok.us/002/ic/special-needs-strategies.pdf)

#### References:

Accessibility Partners, LLC. Disability and Accessibility Consultants, (2011) Interactive Whiteboard Technology: Strategies for Special Needs Students, White Paper

Blossom Learning, (2016) https://www.blossomlearning.com/showresource.aspx?rid=56

Marzano, R. J., & Haystead, M. (2009). Final report on the evaluation of the Promethean technology. Englewood, CO: Marzano Research Laboratory. SMART Technologies. (2006). Interactive Whiteboards and Learning Improving student learning outcomes and streamlining lesson planning, White Paper,

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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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.

The Promethean ActiveBoards will help in communicating with parents/community in and out of school. In school we will be able to demonstrate to parents at events/open housed more effectively the types of learning the students will experience. Out of school students and parents will have access to the lessons that are delivered and recorded on the boards. The boards will allow classroom presentations to be recorded and/or saved for later viewing at home. This will assist parents in understanding the work being presented in the classroom and allow them to better assist their child. We will look to connect with other schools utilizing this technology and share resources. Promethean has a web portal to facilitate this sharing and connections.

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### Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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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."

The district's professional development plan is differentiated to meet the needs of the staff. We leverage the SAMR model and various data to determine teacher need and support systems. This data includes the Clarity Survey, internal surveys, individual feedback and recommendations. The district provides in-person training before, during, and after school hours; during faculty meetings; through external offerings at the Lower Hudson Regional Information Center and Southern Westchester BOCES; at building level Professional Learning Committee meetings; during faculty meetings; via online resources developed specifically for the district population, online courses developed externally, and through our Building Technology Coordinators that are located in each building. Professional development opportunities follow established best practices and respect the various needs and learning styles of our adult learners.

We are currently 100% saturated with Interactive Smart Boards and the Promethean ActivPanel's are very similar. Our professional development will be able to leverage teachers current knowledge and use this when providing the technology training. By scaffolding those skills to new experiences, we will be able to quickly meet all learners needs.

Byram Hills CSD teachers are dedicated professionals, ready to build a modern learning system using the tools and techniques of today. Learning in the 21st century requires new paradigms and flexibility teaching. To make the best possible uses of the technology tools available we must prepare teachers and develop a professional sharing community. What teachers need and desire is more robust training and support, including specific lesson plans that deal with the high cognitive demands and technical rigor needed for today's student centered classroom.

We recognizes that a comprehensive and appropriate professional development program, aligned the NYSE PD Standards, must be developed to ensure that teachers are well prepared to engage students in the technologies that will lead them to be ready for the demands of the 21st century. We use a variety of approaches to meet teachers needs including synchronous PD, asynchronous PD, blended PD, learning communities, lesson/student work shares, edcamp pd, independent studies, literature circles, on demand, job embedded PD, research studies, and more. This well rounded PD offerings allows educators to get the level of support they need to be successful. PD is delivered by in district coaches, peers, outside experts, regional centers, and independently.

#### **Embedded Professional Development**

We believe that embedded and on demand (just in time) PD can make the greatest impact in a system. We have a Building Technology Coordinator (teacher on assignment) in each building to provide this PD. This teacher is NYS Certified in a subject area appropriate to the building they are in. The Building Technology Coordinator receive turnkey training and support staff on all aspect of technology integration and utilization.

#### **Professional Development Offered**

We utilize internal and external sources to provide PD. This includes teachers, administrators, aids, models schools specialist, consultants, and others.

Date	Topic	Audience	Delivery
Ongoing	Promethean Active Boards and Active Inspire	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	PBL and Technology	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Google Apps for Education	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Chromebooks in the Classroom	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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			Mastings/Duona)
			Meetings/Preps) Online
Ongoing	New Teacher Training	K-12 New Teachers	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Model Schools Workshops	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Makerspaces and Maker Culture	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Integrating STEAM Tools (Various: Little Bits, Dash and Dot, Nao Robot, 3D Printing, OzoBots, Etc.)	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	The 5Cs and Technology	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Maximizing the Impact of Interactive Board	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Going 1:1	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Administrative Training (Leading in the 21st Century)	Administration	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Co-Teaching and Technology	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Growth Mindset, Technology, and Makers	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online
Ongoing	Various software specific training	K-12 Teachers and Staff	1:1 and Small Group (After School, Summer, and Meetings/Preps) Online

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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 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.

SUNY New Paltz

9b. Enter the primary Institution phone number.

845-257-7869

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.

Kiersten Greene

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	2. Public	3. Nonpublic	4. Sum of	5. Total Per	6. Total
	Technology	Enrollment	Enrollment	Public and	Pupil Sub-	Nonpublic Loan
	Sub-allocation	(2014-15)	(2014-15)	Nonpublic	allocation	Amount
				Enrollment		
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.

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### Smart Schools Investment Plan - Byram 2016 SSBA App

Classroom Learning Technology

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- 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	333,850
Computer Servers	0
Desktop Computers	0
Laptop Computers	0
Tablet Computers	0
Other Costs	0
Totals:	333,850

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	Promethean ActivPanel	93	3,575	332,475
Interactive Whiteboards	Promethean ActivPanel (partial SSBA)	1	1,375	1,375

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### Smart Schools Investment Plan - Byram 2016 SSBA App

Pre-Kindergarten Classrooms

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## Group 1

1. Provide information regarding how and where the district is currently serving pre-kindergarten students and justify the need for additional space with enrollment projections over 3 years.

(No Response)

- Describe the district's plan to construct, enhance or modernize education facilities to accommodate prekindergarten programs. Such plans must include:
  - Specific descriptions of what the district intends to do to each space;
  - An affirmation that pre-kindergarten classrooms will contain a minimum of 900 square feet per classroom;
  - The number of classrooms involved;
  - The approximate construction costs per classroom; and
  - Confirmation that the space is district-owned or has a long-term lease that exceeds the probable useful life of the improvements.

(No Response)

3. Smart Schools Bond Act funds may only be used for capital construction costs. Describe the type and amount of additional funds that will be required to support ineligible ongoing costs (e.g. instruction, supplies) associated with any additional pre-kindergarten classrooms that the district plans to add.

(No Response)

4. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.

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

Project Number	
(No Response)	

If you have made an allocation for Pre-Kindergarten Classrooms, 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
Construct Pre-K Classrooms	(No Response)
Enhance/Modernize Educational Facilities	(No Response)
Other Costs	(No Response)
Totals:	0

6. 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.

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

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Pre-Kindergarten Classrooms

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Select the allowable expenditure	Item to be purchased	Quantity	Cost per Item	Total Cost
type.				
Repeat to add another item under				
each type.				
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Replace Transportable Classrooms

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### Group 1

1. Describe the district's plan to construct, enhance or modernize education facilities to provide high-quality instructional space by replacing transportable classrooms.

(No Response)

2. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.

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

Project Number		
(No Response)		

 For large projects that seek to blend Smart Schools Bond Act dollars with other funds, please note that Smart Schools Bond Act funds can be allocated on a pro rata basis depending on the number of new classrooms built that directly replace transportable classroom units.

If a district seeks to blend Smart Schools Bond Act dollars with other funds describe below what other funds are being used and what portion of the money will be Smart Schools Bond Act funds.

(No Response)

If you have made an allocation for Replace Transportable Classrooms, 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
Construct New Instructional Space	(No Response)
Enhance/Modernize Existing Instructional Space	(No Response)
Other Costs	(No Response)
Totals:	0

5. 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.

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

type. Repeat to add another item under	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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### Smart Schools Investment Plan - Byram 2016 SSBA App

**High-Tech Security Features** 

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Group 1	G	ro	u	р	1
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 Describe how you intend to use Smart Schools Bond Act funds to install high-tech security features in school buildings and on school campuses.

(No Response)

 All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.

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

Project Number	
(No Response)	

3. Was your project deemed eligible for streamlined Review?

□ Yes

□ No

4. Include the name and license number of the architect or engineer of record.

Name	License Number
(No Response)	(No Response)

If you have made an allocation for High-Tech Security Features, complete this table.
 Note that the calculated Total at the bottom of the table must equal the Total allocation for this cated

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
Capital-Intensive Security Project (Standard Review)	(No Response)
Electronic Security System	(No Response)
Entry Control System	(No Response)
Approved Door Hardening Project	(No Response)
Other Costs	(No Response)
Totals:	0

6. 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.

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

Select the allowable expenditure	Item to be purchased	Quantity	Cost per Item	Total Cost
type.			-	
Repeat to add another item under				
each type.				
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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# Smart Schools Investment Plan - Byram 2016 SSBA App

High-Tech Security Features

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# Smart Schools Investment Plan - Byram 2016 SSBA App

Report

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# Smart Schools Investment Plan - Byram 2016 SSBA App

PPU Report

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