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

SSIP Overview

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

Eric Stockmeyer

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

716-816-3105

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

estockmeyer@buffaloschools.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

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 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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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.

BPS Preliminary SSIP Final_Upload.pdf
03 School Plans by School Grade and Device.pdf
05 SSIP Board Item Approval 5a.pdf
06 20161205 Buffalo State Letter BPS Smart Schools.pdf
12 2016-2019 Technology Plan.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://buffaloschools.org/informationtech.cfm?subpage=126143

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.

33,000

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:

$56,020,356

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.

	Sub-Allocations
School Connectivity	0
Connectivity Projects for Communities	0
Classroom Technology	21,378,393
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0

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	Sub-Allocations
High-Tech Security Features	0
Totals:	**21,378,393**

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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	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	(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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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**

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,

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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
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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)

2. **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)

3. **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.

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

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.

Community Connectivity (Broadband and Wireless)

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

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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.

The Buffalo City School District has nearly 33,000 students, which based on the state standard, means a 3.3 Gb connection speed is required. The District's current connection speed is already in compliance with the minimum connection speed standards identified in the Smart Schools Bond Act. Currently the District has a 10Gbps connection between all schools and between all data rooms within each building. Smart Schools Bond Act funds will be used to maintain and increase these speeds.

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	33,000	3,300,000	3300	10000	10000	Already

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.

The District is currently updating Wireless Access Points (WAPS) that have reached end of life. The existing wireless infrastructure is being upgraded with faster WAPS in all instructional areas capable of providing connectivity for each student, teacher, and administrator to use a mobile computing device. Currently the District has installed 2,650 new AC Wireless Access Points. An additional 1020 Aruba AC Wireless Access Points will be purchased with Smart Schools Bond Act funds to supplement the existing wireless access points capable of leveraging new, faster AC wireless technology. As part of this project, each instructional location will have its own designated WAP capable of supporting 40-50 students simultaneously and support 1:1 programs in classrooms.
The District wants to ensure that all students and staff have wireless access when they need it. To this end, the District closely monitors and manages network traffic to ensure high throughput. In order to meet usage demands with the appropriate level of wireless access, every classroom will have at least one WAP and larger spaces will be outfitted with multiple WAPS.

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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.

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 following classroom technologies will be purchased with Smart Schools Bond Acts funding:
- Student laptop and tablet computers for implementation of 1:1 programs
- Interactive Classroom Displays Including Audio Enhancement
- STEAM Technologies including 3D virtual computing and 3D Printing Technology
- Videoconferencing units to allow for real-time/long-distance communication

Each buildings current electrical, HVAC and overall infrastructure are currently able to support this influx of mobile devices necessary to implement these technologies.

With the first phase of the District's 1:1 program in 2016-2017, the implementation of laptop carts in classrooms provide Smart Charging Technology: charging power is directed to where it's needed most, so each notebook is charged as quickly as possible. In addition, the cart phases the power of the notebook outlets up over six banks (30 unit carts), preventing the breaker from tripping on start up of charging. Interactive classroom displays leverage energy efficient LED technology, thereby resulting in energy savings over the District's current fleet of interactive whiteboards.

In addition to the purchase of classroom technology, the District will be using SSBA funding to upgrade servers and data storage to support STEM applications and other innovative uses of technology in classrooms. The District's Data Center locations have redundant cooling systems, UPS systems and generated power. Server and data storage upgrades are targeted for SSIP submission for School Connectivity in July 2017.

Equally important is the upgrading of the District's network switches. The District currently has an RFP to completely refresh its inventory of network switches to support new technology and the greater demands a 1:1 deployment has on a district's network infrastructure. The District conducted an RFP in April 2017 to determine pricing for the purchase and installation of network switches. This will be included in the SSIP submission for School Connectivity in July 2017. Switching upgrades will support Power Over Ethernet (POE) and have been properly sized in each IDF to accommodate not only necessary Ethernet ports, but to accommodate all the need for POE devices, ie: wireless access points, VOIP phones, and security video cameras.

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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 District's technology plan ensures that all students K-12 have equitable access to computer technology in every grade level regardless if it is a traditional general education classroom, blended learning environment, or a self-contained classroom. The District continues to align and adapt new eResources that support individual lesson plans that not only include instructional rigor, but are personalized to the instructional need of that student. These technology resources benefit **ALL** students, regardless of whether they are a general education student, English Language Learner, or a student identified as having a disability.

The Individuals with Disabilities Education Act (IDEA), first enacted by Congress in 1975, and subsequently updated in 2004, 2006, and 2011, provides guidelines for differentiating instruction for students with an Individual Education Plan (IEP). Differentiating instruction for those identified with special needs means looking at the unique needs of **ALL** students, not just those with special education accommodations.

Instructional Supports	**Sample Classroom Activities**
Differentiating Content/Topic • Survey students to determine their areas of interest to identify topics for content objectives. • Pretest students to determine what they already know.	Technology resources: • Use free online survey tools, such as SurveyMonkey, that allow for conducting quick and easy interest inventories. • Select and implement software tutorials with built-in "intelligence" that moves student to more difficult questions/problems as mastery is demonstrated and review/remediation activities when lack of mastery occurs.
Differentiating Process/Activities • Support collaborative learning while tapping the individual strengths of each learner using group project based learning strategies.	Technology resources: • Provide students with information displayed as graphic organizers, maps, diagrams, graphs, and/or charts when presenting new content. • Create learning groups to collectively populate an online shared learning space, such as a wiki or shared Google document, allowing each student to focus on one area of interest or expertise.
Differentiating Product • Provide students with a variety of options to demonstrate their knowledge of learning outcomes.	Technology resources: • Allow students to use graphic organizers, maps, diagrams, graphs, and/or charts to demonstrate mastery of content. • Give students choices for culminating projects that include video, animation, music, artistic compositions, and other nonprint formats.

As identified in Individual Education Plans (IEPs) or individual learning plans, students may benefit from specific adaptive/assistive technology resources including, but not limited to audio enhancement, braille translators, communication boards, mobile computing device(s). The use of assistive technology specifically selected to meet the needs of individual students provides students with a pathway to participate in the general curriculum. Specific need for a student is identified through the Assistive Technology Coordinator in collaboration with the Special Education department. The Information Technology department confirms that each assistive technology resource is compatible with district technology resources so that students with disabilities can participate in the general curriculum.

As the District works towards providing each student with a mobile computing device, special attention will be made to ensure that selected devices

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address the assistive technology needs of students' with a disability.
In addition to a high population of students identified as having a learning disability, the Buffalo City School District has multiple schools with a high population of English Language Learners (ELLs). The IT Department works with the Multilingual Education Department to select technology to meet the unique learning needs of ELL students. For example, mobile devices are being used by teachers of ELL students to leverage multimedia technology to incorporate pictures and videos into daily instruction. This is of special benefit to ELL students since it can prepare them with the necessary contextual cues to understand new concepts. Visual information can provide the necessary bridge or scaffold between everyday language and more difficult academic language, thereby improving student learning. Furthermore, the use of technology allows students to show what they have learned in multiple ways, thereby offering a more accurate assessment of their growth.
To support this effort, Instructional Technology Coaches provide job embedded professional development to teachers on the use of mobile devices and other technology that benefits ELL students. The focus of this PD is to place the ELL student in the role of content creator, not just a consumer of material. Learning applications such as Comic Life or iMovie provide a mechanism for students to use multimedia to express understanding of topics. In addition, the District uses literacy software titles such as iReady, myON, Read 180, and Next Lesson in targeted ways to provide greater student achievement for ELL students. The benefits of these personalized learning resources extend beyond English Language Learners to all learners to help reduce learning gaps between students and the Common Core Learning Standards.

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.

Connected mobile technologies have huge potential for enhancing the reach and quality of education for students and families in the Buffalo Public Schools. Through connected technologies, the world can be a student’s classroom. Moreover, resources that BPS invests in can also be resources the community can share in and have access to. This is played out each day in BPS with students taking virtual classes, parents and community members connecting to schools through the Parent Portal and BPS.
The District is committed to support anywhere, anytime access to digital resources by students and teachers. Supports will be put in place for students, teachers and administrators to get greater access to resources when they are not at school. The BPS Technology Center provides users with access to District files and applications on any internet connected device, regardless of whether or not they are on the district network. As the District moves in the direction of mobile applications, the district will focus on optimizing resources to be easily accessible on mobile devices. In addition to public after-hours access to school computer labs, the District has developed a partnership with the Buffalo and Erie County Public Library System to install BPS Desktop on library computer systems.
Buffalo Schools intends to extend our digital resources to promote greater parental involvement and community participation within our schools. BPS Desktop, students interacting with their schoolwork via cell phones, Parent Portal, and the Schoology Learning Management System are just some of the tools BPS currently uses to engage with students and parents both inside and outside of the school district.

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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."

Ongoing quality professional development is vital to fully leverage technology to enhance instruction successfully. Utilizing local funds, the District employs Instructional Technology Coaches whose purpose is to provide job embedded professional development to teachers on the use of mobile devices and other innovative technology that benefits all students. This ongoing support is vital to build capacity and create a sustainable system moving forward.

Instructional Technology Coaches foster an awareness of technology resources and facilitate the integration of technology in the classroom in ways that create interactive authentic learning experiences for our students. Their goal is to help develop learners who can locate, evaluate and synthesize information, using it to develop and support an idea or to create something new. It is the District's expectation that students will graduate as technology literate individuals possessing transferable skills that ensure that they are prepared to be active participants and lifelong learners in a global community.

Beyond job-embedded professional development, the following are also examples in which PD is provided to administrators, teachers and staff so technology purchased can successfully enhance instruction:

Windows and Internet Basics

Audience: All Teachers

Method : Face to Face Workshop

Covers internet basics such as file management, customizing your desktop and computer settings, creating strong and secure passwords, network storage and access to documents, as well as Internet safety.

Introduction to Assistive Technology

Audience: All Teachers

Method: Face to Face Workshop

Teachers will be guided through the different devices used by students who require assistive technology and develop plans to maximize their value for students who require them.

Teacher Webpage as an Instructional Tool

Audience: All Teachers

Method: Online Webinars

This course will show participants how to incorporate the use of their Teacher Web Pages into instruction, as well as a communication tool

Arts Integration: Using Digital Tools in the Classroom

Audience: Middle and High School Teachers

Method: Online Asynchronous Learning (Learning Management System)

Teachers will learn to use free digital tools for things such as photo editing, image creation, video production, digital painting, script writing, work art, storytelling, and music creation.

Introduction to BPS Data

Audience: All Teachers

Method: Online Asynchronous Learning (Learning Management System)

Teachers will gain a knowledge base of the major data systems utilized in the Buffalo Public Schools system. The course starts with the very basics (finding the resources, logging in, what information is housed in that particular system), covers the middle-level usage running reports, navigating systems, and high-level DDI focused instructional practices. The data systems that will be covered are: Infinite Campus, Illuminate, MClass, EdVantage Data Dashboard and NYSED data reports.

Introduction to Mobile Devices

Audience: All Teachers

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Method: Online Asynchronous Learning (Learning Management System)
This course will introduce how mobile devices can be used to create interactive and engaging lessons for learners. Also covered in addition to curriculum content is examples in the categories of Assessments, Learning Systems, and Teacher Tools.

Visual Displays in the Classroom
Audience: All Teachers
Method: Online Asynchronous Learning (Learning Management System)
This course will introduce how can be used to create visually engaging, interactive lessons. Special attention will be focused on leveraging interactive displays to embed multimedia content into daily lessons. Also covered is how interactive displays can be used in conjunction with other digital tools (Ex. web-cams, mobile devices, assessment management system, STEM equipment).

Supporting STEAM through Innovative Technology
Audience: All Teachers
Method: Face to Face Workshops
This course will introduce users on how Innovative Technology such as virtual reality computers and 3D printers can be used used to foster and grow student knowledge in STEAM (Science, Technology, Engineering, Arts, & Math).

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.

Buffalo State College (SUNY)

9b. Enter the primary Institution phone number.

(716) 878-4214

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.

Joseph Zawicki, Ph.D.

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

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10a. Describe your plan to loan purchased hardware to nonpublic schools within your district. The plan should use your district's nonpublic per-student loan amount calculated below, within the framework of the guidance. Please enter the date by which nonpublic schools must request classroom technology items. Also, specify in your response the devices that the nonpublic schools have requested, as well as in the in the Budget and the Expenditure Table at the end of the page.

The Smart Schools Bond Act provides that non-public schools in the district be lent, upon request, loans of classroom technology equal on a per pupil basis to the per pupil amounts spent on classroom technology for public school students (up to $250 per pupil). Based on the Buffalo Public Schools Classroom Technology expenditures, non-public schools will be eligible for the maximum $250 per pupil. The District's has had an ongoing engagement with non-public schools via emails, phone conversations, and public meetings regarding their eligibility for and the process for selecting and acquiring loan purchased hardware through the Smart Schools Bond Act. A letter has been sent out to nonpublic schools establishing June 30 as the deadline to request use of classroom technology through the SSBA.
Below are the student populations and dollar amounts allocated to each non-public school in Buffalo. By legislation, the school 2014-2015 populations were calculated and provided by New York State and used in the $250 per student in-kind loan calculation to non-pub schools.

NONPUB_INST_NAME	K-6 Enrollment	7-12 Enrollment	Total NonPub	Funding at $250 Per
NOTRE DAME ACADEMY	350	93	443	$110,750
ST JOSEPH UNIVERSITY SCHOOL	125	40	165	$41,250
OUR LADY OF BLACK ROCK	128	29	157	$39,250
NARDIN ACADEMY HIGH SCHOOL	0	469	469	$117,250
BISHOP TIMON-SAINT JUDE HS	0	258	258	$64,500
MT MERCY ACADEMY	0	228	228	$57,000
ST MARK SCHOOL	336	81	417	$104,250
CANISIUS HIGH SCHOOL	0	878	878	$219,500
NARDIN ACADEMY-ELEMENTARY	235	110	345	$86,250
CATHOLIC ACADEMY WEST BUFFALO	163	32	195	$48,750
NATIVITYMIGUEL MID SCHOOL	38	57	95	$23,750
DARUL-ULOOM AL MADANIA	119	145	264	$66,000
SAINTS TABERNACLE OF EXCELLE	14	9	23	$5,750
ACADEMY OF SCHOLARS (THE)	4	5	9	$2,250
BUFFALO SEMINARY	0	222	222	$55,500
ELMWOOD FRANKLIN SCHOOL	199	63	262	$65,500

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NICHOLS SCHOOL	83	490	573	$143,250
UNIVERSAL SCHOOL	76	26	102	$25,500
		Non-pub Population	**5105**	
		Maximum $ Per Student	**$250**	
		Max Non-pub Allocation	**$1,276,250**	

Since the loaned devices remain the property of the district of location, nonpublic schools may not borrow devices that cannot be easily removed and returned to the school district (i.e. wiring or other more capital-intensive work). Prices for equipment will be solidified after a formal bid process undertaken by the BPS Department of Purchase.

10b. A final Smart Schools Investment Plan cannot be approved until school authorities have adopted regulations specifying the date by which requests from nonpublic schools for the purchase and loan of Smart Schools Bond Act classroom technology must be received by the district.

☑ By checking this box, you certify that you have such a plan and associated regulations in place that have been made public.

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	21,378,393	32,165	5,105	37,270	574	1,276,250

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.

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	Sub-Allocation
Interactive Whiteboards	1,307,200
Computer Servers	0
Desktop Computers	4,330,920
Laptop Computers	7,808,760
Tablet Computers	4,113,240
Other Costs	3,818,273
Totals:	**21,378,393**

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
Other Costs	3D printer	60	1,200	72,000
Desktop Computers	3D all-in-one computer	60	1,940	116,400
Other Costs	videoconferencing units	60	4,155	249,300
Other Costs	non-pub share	1	1,276,250	1,276,250
Other Costs	laptop storage/charging stations	1,500	1,200	1,800,000
Other Costs	tablet storage/charging stations	700	300	210,000
Interactive Whiteboards	interactive display	320	4,085	1,307,200
Laptop Computers	Dell 3189 laptop computer	11,940	579	6,913,260
Tablet Computers	iPad tablet computer	9,080	399	3,622,920
Desktop Computers	zSpace z300 AIO 3D STEM Computer (includes 3D STEM computer, 3 years licensing for core-operating system necessary to carry out STEM activities, and 3 year warranty coverage)	720	5,753	4,142,160
Desktop Computers	zView Camera for zSpace z300 computer station	72	155	11,160
Desktop Computers	zSpace z300 accessories kit (Includes 6 Leader Eyewear, 12 Follower Eyewear, 1 Stylus for zSpace 300)	144	425	61,200

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Other Costs	Integration Cost (2%) for Laptop Asset Tagging, BIOS Setting, and Image Loading (by Vendor)	1	138,265	138,265
Laptop Computers	Extended Warranty (3-Year) for Dell 3189 Laptop	11,940	50	597,000
Laptop Computers	Case for Dell 3189 Laptop	11,940	11	131,340
Laptop Computers	RFID / Theft Deterrent Tag for Dell 3189 Laptop	11,940	14	167,160
Tablet Computers	Cover for Apple iPad	9,080	40	363,200
Tablet Computers	RFID / Theft Deterrent Tag for Apple iPad	9,080	14	127,120
Other Costs	Integration Cost (2%) for iPad Asset Tagging, BIOS Setting, and Image Loading (by Vendor)	1	72,458	72,458

Pre-Kindergarten Classrooms

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)

2. **Describe the district's plan to construct, enhance or modernize education facilities to accommodate pre-kindergarten 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)

5. **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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Pre-Kindergarten Classrooms

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

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)

3. **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)

4. **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.

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

High-Tech Security Features

1. 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)

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)

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)

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