## SSBA - Special Education Schools - WECSTechUpgrade1

SSIP Overview

### Page Last Modified: 08/31/2016

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

Linda Zinn

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

914-277-5533

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

lzinn@wecschool.org

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

First submission

3. Pursuant to the requirements of the Smart Schools funding, the planning process must include consultation with parents, teachers and students.

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
- 4. 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 Smart Schools Investment Plan was posted on the school website for at least two weeks. The school included an address to which any written comments on the plan should be sent.
  - The school board/trustees conducted a hearing that enabled stakeholders to respond to the Plan. This hearing may have occured as part of a normal Board meeting, but adequate notice of the event must have been provided through the school website for at least two weeks prior to the meeting.
  - Definition The final proposed plan that has been submitted has been posted on the school's website.and will remain for the duration of the related projects.
  - 4a. 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.wecschool.org/parents-and-guardians

5. Your school's Smart Schools funding appropriation is:

\$23,601

6. Enter the budget sub-allocations by category that you are submitting for approval at this time. If you are not budgeting Smart Schools 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
Classroom Technology	23,601
Replacement of Transportable Classroom Units	0
High-Tech Security	0
Totals:	23,601

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School Connectivity

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

N/A

2. Describe how the school plans to use digital connectivity and technology to improve teaching and learning.

N/A

3. Does your School Connectivity project require new construction or substantially altered space and result in capitalized cost in excess of \$100,000?

(No Response)

4. 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	0
Outside Plant Costs	0
School Internal Connections and Components	0
Professional Services	0
Testing	0
Other Upfront Costs	0
Other Costs	0
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 eligible for tax-exempt financing to be reimbursed with Smart Schools funds. 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. 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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Classroom Learning Technology Equipment (Devices)

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### 1. Describe the devices you intend to purchase and their compatibility with existing or planned platforms or systems.

Funding from the Smart Schools Bond Act would be used to purchase the following items:

A) iPads with related software applications: The iPad program was initiated at WEC in 2012. Thanks to generous funding, WEC has been able to purchase 80+ iPads (one for each of our students). We are now seeking funding to purchase much-needed replacement iPads for those that are either damaged or not working along with related software applications. WEC's iPad program has made a huge difference to the students in every facet of their school lives including academics, communication skills, functional skills, social skills and more. Thanks to this funding, no child will be without an iPad if theirs breaks because we will have a readily available replacement units.

Xcellon 10-port Powered USB 3.0 Aluminum Hub Charging Stations: These would be used to charge iPads, primarily, but may be used with any USB devices. The aluminum hub is durable, and it dissipates heat, which eliminates the risk of burns for students who might inadvertently touch it. These qualities are important as we work with students who may have motor control issues.

### B) Laptops:

-- HP Stream 11-R020NR 11.6" Notebooks, with Celeron N3050 1.6 ghz processor, 2 GB RAM, and 32 GB solid-state drive. This would allow us to equip each classroom with a small laptop for student use as well as NY State student testing.

-- HP Pavilion 15-P390 15.6" Touchscreen Notebooks, with A-Series A10-7300 1.9 ghz processor, 8 GB RAM, and 1 TB hard drive. This purchase would enable all of our teachers to have touch screen laptops in the classroom for school use. This would enable them to maintain student records, access students' health histories and special needs, stay abreast of best practices in special education, communicate with administrators, and build student curriculum. The touch screen makes for quick and convenient access to programs and files. If a teacher were to use this with students, the touch screen would also give students an easy way to interact with the technology, as many who are enrolled in our program are lacking in fine motor skills.

-- Apple Macbook Air Notebooks, with an Intel Core i5 1.6 ghz processor, 4 GB RAM, and 128 GB solid-state drive. These notebooks would be used for mac-based learning in our technology class and would allow us to use a greater range of Mac-based educational software. They would provide compatibility between iPads and would be used to help keep our fleet of iPads updated. Long battery life, its lightweight profile, and durable nature allows for greater portability around the school.

C) Mobile SMART Board, an SB480i6 series interactive whiteboard with a SMART UF70 projector. The SMART Board is a touch-sensitive whiteboard that is connected to a computer and a projector. Lessons or presentations are made on computer programs and then the projector displays the image onto the whiteboard. The computer is then controlled by either using a finger to open or close programs and move objects, or by electronic pens to write words. It is a tool that is invaluable for classrooms, allowing for increased accessibility for different types of learners. SMART Boards provide support for students' visual, auditory, physical and mobility, as well as social and communication needs. WEC's goal is to provide a SMART Board for every classroom. At present, WEC serves students, ages 5-21, in 12 classrooms. However, we only have 3 SMART Boards. Two of these SMART Boards are portable and the classroom teachers share them. This means each classroom only gets to use them every few weeks. The SMART Board we will purchase is also mounted on casters so it can easily be moved from room to room. This will allow our classrooms to have more regular and consistent access to SMART Board technology. The projector can support playback for a number of devices beyond the SMART Board, including DVD players, computers, iPads, and more. With a SMART Board in every classroom, we anticipate that our students will increase their skill building and become more engaged in the learning process.

WECS currently has a robust Wi-Fi network, offering sufficient bandwidth to meet student demand. We have over 130 IP addresses, more than enough to handle a wireless connection for each of our 80 students and 40 teachers in the school.

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# 2. Describe how the proposed technology purchases will improve teaching and learning inside or outside of the classroom.

Because disabilities vary from student to student, the iPad, which can be customized, is of great benefit. For instance, a student who is verbal can utilize academic iPad software (math, science, English, and reading), while a student who is non-verbal could use an application like Proloquo2Go, which provides a full-featured communication solution. This ability to provide individualized instruction for children is valuable, especially at a school where so many of our students have a number of special needs.

WEC Teacher Danielle Vought has stated that "One of the best things about IXL (app for iPad) is that students can access it from school and from home. This program works very well for my students. The program is fun, animated and colorful! The kids get excited to work for their 'reward' at the end of the skill."

After four years of having iPads in the classroom, evaluations, including diagnostic tools, adaptive behavior scales, behavior checklists, independent living screening tests, standardized assessments, and classroom observations consistently demonstrate that 75% of our students are able to read – an outstanding rate given the development disabilities of the population we serve. 100% of students have been better able to control their outbursts and work independently and the attention spans of the students have increased by 50%. Since the initiation of the program, there has been an increase in the number of students who have been able to enter public education in special or typical classrooms. The iPad has proven to be a great equalizer, one of WEC's main goals, as it is customizable for all 80 of our students.

Thanks to the use of iPads in the classroom, we anticipate the following long-term outcomes: 1) 68 children (85%) will test at a higher level of receptive and expressive language skills; 2) 76 children (95%) will improve their story and language comprehension by half a grade level; 3) 64 children (80%) of children will attain a higher level of cognitive development as demonstrated by the ability to follow instructions and event sequencing testing; 4) 64 children (80%) will demonstrate a higher level of frustration tolerance as noted by staff observation; 5) 72 children (90%) will demonstrate positive social skills (patience, taking turns, etc.) as noted by staff observation; 6) 76 children (95%) will demonstrate the ability to work independently as noted by staff observation; 7) 76 children (95%) will increase their engagement in the learning process, as evidenced through testing and classroom participation.

The SMART Board also allows teachers to address different learning styles - visual, auditory and kinesthetic. It engages all types of students and facilitates differentiated instruction. A SMART Board helps students with autism, for example, improve communication skills through group collaboration (Vanderleer, 2007). The interactive whiteboard gives educators the ability to present things visually, and provides ease in creating and altering activities. Many of the students we serve have not yet developed all the fine motor skills necessary to operate a mouse. When using the SMART Board, a student's finger becomes the "mouse", and he or she can move or touch anywhere on the screen with ease.

With access to SMART Boards, we anticipate that 100% of students will be more engaged in the learning process; 70% of students will increase their attention span and ability to focus; 50% of students will have improved cognition; and 60% of students with autism and communication difficulties will improve their communication skills through group collaboration.

Additionally, we anticipate the following long-term outcomes thanks to the use of the SMART Board in the classroom: 1) Students at WEC will learn at a faster rate from improved differentiated instruction strategies facilitated by use of the SMART Board, helping some to transition more quickly back to a mainstream school setting. 2) Students will have improved ability to work independently, which will help them in their transition to post-WEC life in the community. 3) Teachers at WEC have a long-term tool for rapid assessment, whereby learners can receive immediate feedback. Teachers will be able to quickly identify individual strengths and weaknesses in various subject areas and isolate areas/topics that need more focus or review.

Research has shown that the use of laptops by special education students has increased engagement in school work, increased students' motivation to work independently, and improved class participation and social interaction with other students (Harris and Smith, 2004). The use of laptops and regular access to the internet in the classroom will expand student learning outside of the classroom, allowing students access to stories, images, sound, and research from all over the world. Teachers will also benefit from laptops in creating specialized curriculum for special needs students, and will have access allowing them to research best practices in special education. In a 2004 study from the University of Southern Maine, more than 70% of surveyed teachers reported that the laptops helped them to more effectively meet their curriculum goals, and individualize their curriculum to meet particular student needs. Over 75% of the teachers reported that having the laptops helped them better meet the statewide learning standards (Silvernail and Lane, 2004).

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The use of technology in our program supports our goals to foster independence, knowledge, and confidence through a curriculum that addresses the individual needs of each student. Each of these technology tools help us in our overall objectives, which include:

- To create a customized, comprehensive curriculum for each child that strengthens reading, writing, math, and science abilities;
- To provide learning opportunities for children that help them communicate effectively, acquire and use problem solving skills, and positively interact with peers;
- To increase the ability of each student to learn independently through customized, high-tech learning tools;
- To offer a variety of extracurricular enrichment programs that include homework assistance and learning strategies, enhance computer skills, encourage creativity, and foster social interaction;
- To improve social competence and encourage appropriate behavior through daily practice;
- To increase students' level of independence and self-reliance;
- To provide realistic life experiences for children with disabilities that prepare them to live in their community.
- 3. To ensure the sustainability of technology purchases made with Smart Schools funds, schools must have a plan to maintain and support technology purchases reimbursed with Smart Schools funds. This sustainability plan should support recurring costs of use that are ineligible for Smart Schools 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.

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

- 4. Schools must ensure that devices purchased with Smart Schools funds will be distributed, prepared for use, maintained and supported appropriately. Schools must maintain detailed device inventories in accordance with generally accepted accounting principles.
  - By checking this box, you certify that the school has a distribution and inventory management plan and system in place.
- 5. If you are submitting an allocation for Classroom Educational 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	4,351
Computer Servers	0
Desktop Computers	0
Laptop Computers	7,250
Tablet Computers	12,000
Other Costs	(No Response)
Totals:	23,601

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 with Smart Schools funds. 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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Select the allowable expenditure	Item to be purchased	Quantity	Cost per Item	Total Cost
type.				
Repeat to add another item under				
each type.				
Interactive Whiteboards	Mobile SMART Board	1	4,351	4,351
Laptop Computers	HP Stream 11-R020NR 11.6	12	225	2,700
Laptop Computers	HP Pavilion 15-P390 15.6	5	550	2,750
Laptop Computers	Apple Macbook Air Notebooks, Intel i5 1.6 ghz processor, 4 GB RAM, and 128 GB	2	900	1,800
Tablet Computers	iPads	30	400	12,000

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Replace/Modernize Transportable Classrooms

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

N/A

2. Does your Classroom Trailer project require new construction or substantially altered space and result in capitalized cost in excess of \$100,000?

(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	0
Enhance/Modernize Existing Instructional Space	0
Other Costs	0
Totals:	0

4. 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 with Smart Schools funds. 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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High-Tech Security Features

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1. Describe how you intend to use Smart Schools funds to install high-tech security features in school buildings and on school campuses.

N/A

2. Does your High-Tech Security project require new construction or substantially altered space and result in capitalized cost in excess of \$100,000?

(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 category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Electronic Security System	0
Entry Control System	0
Approved Door Hardening Project	0
Other Costs	0
Totals:	0

4. 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 with Smart Schools funds. 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)