



Copenhagen Central School
Scott N. Connell, Superintendent

Smart School Investment Plan

Phase #1

Classroom Technologies

Interactive Displays

January, 2017

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Executive Summary

SMART SCHOOLS BOND ACT

In his 2014 State of the State Address, Governor Cuomo called for New York State to invest \$2 billion in its schools through a Smart Schools Bond Act – an initiative that would finance educational technology and infrastructure, providing students access to the latest technology and connectivity needed to succeed and compete in the global economy. New Yorker's agreed and voted in the Smart Schools Bond Act (SSBA) in November 2014. Copenhagen School has been allotted \$625,435 dollars through the Smart Schools Bond Act. The Smart Schools Bond Act identifies specific areas approved for expenditure.

We intend to use our allocated funds in three phases covering the areas of:

- Classroom Technologies;
- Infrastructure;
- Safety and Security.

We propose the **Copenhagen Central School - Phase I Spending Plan** in the amount of \$243,887.40 to purchase classroom interactive displays to replace current end of life solutions.

Our plan is flexible and will be reviewed regularly to assure that our money is invested wisely. Investments must be approved by the Board of Education, are open for public comment, and then approved by the NYS Department of Education. The Smart Schools program reimburses the district after purchase.

Plan Overview

Copenhagen Central School is committed to the full integration of 21st century technology, capitalizing on its potential to transform and modernize the educational environment. Technology integration focus areas include: **Infrastructure:** Create and maintain a robust infrastructure originating from a centralized Network Operations Center and branching out over a fiber infrastructure, the district provides a secure, stable network carrying data, voice and video. **Hardware:** *Continue to seek digital technology solutions that enable staff to facilitate learning through technology** and students to consume information and compose products representative of their learning. The District is committed to level the playing field for all students regardless of socioeconomic status by providing devices for every student. We seek to also improve the safety and security of the physical campus as well as the digital information contained therein. **Digital Content & Curriculum Resources:** We will continue to integrate digital content and electronic curriculum resources into the District's collection of instructional materials. Examples are: interactive, available 24/7, easily-upgraded, customizable, based on student and teacher needs. These resources should be used to: streamline classroom processes increasing time spent on instruction and decreasing time spent on non-instructional duties, help students become more informed digital consumers and make technology a transparent tool in the learning process. **Professional Development:** Provide staff with PD opportunities year round. PD opportunities specific to integration of technology are offered through multiple means including workshops, after-school hands-on learning opportunities, department and faculty meetings, one-on-one tutorial sessions, and just-in-time classroom assistance for first time classroom implementations.

* Technology provides the capacity for a complete redefinition of the teaching and learning process. We recognize that technology is not the focus, rather it is the foundation that supports and provides the strength for our learning program. It is our goal at CCS to purchase **interactive displays to facilitate learning through technology** in each of our instructional spaces.

We recognize that graduates of Copenhagen Central School will require different knowledge, skills, and expectations than previous generations in order to live and work successfully in our global society. To help create the society we desire, young adults will need to know how to learn in rapidly changing work settings, solve problems, and make decisions in an information-rich environment. They will also need to know how to communicate and work with an increasingly divergent peer group in a technologically-oriented society. Instructionally, we need to provide access to tools that enhance pedagogy and classroom lesson-design as well as to actively engage students in their learning. With regard to student learning, the specific classroom technologies we are seeking to purchase will enhance student learning by stimulating intellectual curiosity and capacity while increasing student engagement in their learning. Interactive displays facilitate problem-solving and collaboration between students and enables the educational program to replicate how students seek information in their lives.

Tech Infrastructure Pre-Conditions

The district invested in its' infrastructure through a capital project to posses sufficient connectivity to support effective use of devices within our school building.

Connectivity Speed Calculator

	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	481	48100	48.1	1000	1000	Current

The district currently has high-speed broadband. However, our plan includes utilizing smart school funds to upgrade wireless connectivity throughput by replacing wireless connectivity access points with AC protocol with wave 2 technology.

Smart Schools Investment Plan Goals

Graduates of Copenhagen Central School will require different knowledge, skills, and expectations than previous generations in order to live and work successfully in our global society. To help create the society we desire, young adults will need to know how to learn in rapidly changing work settings, solve problems, and make decisions in an information-rich environment. They will also need to know how to communicate and work with an increasingly divergent peer group in a technologically-oriented society. Our goals can be organized into two overriding categories:

<u>Instruction</u>	<u>Learning</u>
<p><i>Technology is used to enhance the instructional program by:</i></p> <ul style="list-style-type: none"> ● Providing access to tools that enhance pedagogy and classroom lesson design ● Actively engaging students in their learning ● Customizing instruction based on individual student needs ● Providing teachers with access to professional development to support their abilities to modernize the instructional program 	<p><i>Technology is used to enhance student learning by:</i></p> <ul style="list-style-type: none"> ● Stimulating intellectual curiosity and capacity ● Increasing student engagement in learning ● Facilitating problem-solving and collaboration between students ● Ensuring the educational program replicates how students seek information in their lives ● Providing anywhere access to educational resources ● Providing every learner equal access to all resources.

Technology provides the capacity for a complete redefinition of the teaching and learning process. We recognize that technology is not the focus, rather it is the foundation that supports and provides the strength for our learning program. It is our goal at CCS to create an environment where teachers, staff and students, can create and share knowledge and information in ways previously unimagined.

Purchase Plan and Allocation of Funds

Area of Expenditure	Allocation
Classroom Technology (Interactive Displays)	\$243,887.40

Professional Development

Copenhagen Central School has a rich history of offering quality professional development in the field of instructional technologies. Having been recognized for our innovation in technology, our **model** has been studied and emulated in schools throughout the state.

CCS was a leader in the implementation of interactive displays, starting in the late 1990s. Throughout the years, classrooms were first outfitted with projection devices linked to desktop computers, leading up to our current situation which includes a variety of display solutions that incorporate a range of interactivity from simple display to interactive touch devices. As each learning space was equipped, we made a conscious effort to match the instructional needs of the classroom and teacher with the available technology within the budget we had to work. This has brought us to a point where our staff understands the importance and philosophy of visual interactive delivery. They are anxious to cross that digital divide into the next generation of interactive classroom teaching and learning solutions.

Our teachers and staff accept technological professional development as just another part of how we do business at CCS. Though the implementation of every project, from the early stages of digital content delivery, to 1:1, to cloud based computing, to learning management systems, teachers have come to expect ongoing quality professional development to ensure seamless, stress-free technology integration. As a district, through the leadership of our Technology Committee, professional development, combined with continuous support, is recognized as the anchor of successful classroom implementation. We have and will continue to utilize a variety of delivery methods to provide training for our staff. Those include but are not limited to:

- New Teacher Orientation
- Summer Boot Camps
- “Tech Thursdays”
- Model Schools Trending Technology Committee Participation
- Just in Time Classroom Assistance
- Superintendent’s Days
- Faculty Meetings
- Teacher Requests
- Invitation by Interest
- Professional Conferences
- Webinars
- Online Courses

Beyond that, it is our goal to continue moving our teachers along the continuum from merely substituting technology for traditional classroom activities to completely redefining how learning occurs.

Sustainability Plan

Phase One of Smart Schools Investment planning at CCS is actually a step that was inevitably going to happen as part of our established sustainability and replacement schedule. The classroom technologies provided in this phase of SSIP will replace equipment ranging in age from 6 - 15 years. The cost of maintenance and consumables related to the current classroom displays is greater than the cost of replacement.

Copenhagen Central School District is experienced in finding affordable technology solutions and maximizing funding opportunities to provide the most cost effective, technology rich, academic programs for our students and staff.

The Technology Department has developed a sustainability plan for all current technology tools as well as those purchased through the Smart Schools Bond Act. The technology budget has allocations for regular replacement of antiquated equipment through funding streams that include:

- multi-year purchases;
- state software and hardware funds;
- technology line item in our school budget;
- continuously seeking and securing grant opportunities.

We anticipate technology will change drastically throughout SSIP investments, and we plan to adjust our course of sustainability based on these funding sources.