

*Royalton-Hartland Central School District  
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*Smart Schools Investment Plan  
2015-2016*



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## **ROYALTON-HARTLAND CENTRAL SCHOOL DISTRICT SMART SCHOOLS INVESTMENT PLAN**

### **STAKEHOLDERS**

- Board of Education
  - Daniel Bragg, President
  - Kenneth Koch, Vice President
  - Keith Bond
  - Carrie Choate
  - Sara Fry
  - Chad Owen
  - Jeffrey Waters
- Sam Arnold, High School Teacher
- Gary Bell, High School Principal
- Kelly Cousins, Middle School Librarian
- Logan Edwards, Student
- Adam Eschborn, Middle School Teacher/Technology Integration
- John Fisgus, Middle School Principal
- Michael Fisher, Director of Facilities
- Kelly Griffith, School Business Administrator
- Jessica Heideman, Community Member
- Christina Henderson, Elementary School Teacher
- Dr. Roger Klatt, Superintendent of Schools
- Ronan Klug, Student
- Kimberly LaMacchia, Elementary School Teacher
- James Luckman, Director of Technology
- Daniel Mault, Elementary School Teacher/Technology Integration
- Sonora R. Miller, Royalton Hartland Community Library Director
- Sheila Murphy, Assistant Superintendent
- Christopher Schaus, High School Teacher/Technology Integration
- Linda Schifferle, Parent
- Wendy Schlosser, Middle School Teacher
- Jeremy Silsby, Parent
- Donna VanSlyke, Elementary School Principal

#### **I. BANDWIDTH PRECONDITION**

As a precondition to utilizing allocated Smart Schools Bond Act funds the District has confirmed there is adequate bandwidth in excess of 100 Mbps per 1,000 students to sustain the increase of classroom devices. The Royalton-Hartland Central School District is currently equipped with a high speed 10 GB LAN and 1 GB WAN access through Erie 1 BOCES.

- District student enrollment: 1359
- District instructional staff: 84
- District non-instructional staff: 43

## **II. NETWORK INFRASTRUCTURE**

Network infrastructure including wireless access has been upgraded over the last two years and a plan to expand wireless capacity using E-rate funds has been proposed and submitted for approval by the Universal Service Administrative Company. While current wireless access adequately provides high levels of throughput for devices, the upgraded wireless system will provide improved speed and reliability for additional devices. Network traffic is regularly monitored and managed to provide high quality transmission for all devices.

## **III. INSTRUCTIONAL TECHNOLOGY PLAN & SMART SCHOOLS INVESTMENT PLAN OVERVIEW**

The Royalton-Hartland Central School District was allocated \$1,197,557 as part of the Smart Schools Bond Act passed in 2014 by a state wide referendum. The Smart Schools Bond Act (SSBA) supports educational technology and infrastructure to improve teaching and learning. The plan offers funding in four main areas: construct or modernize educational facilities for pre-kindergarten students, install high-speed broadband or wireless, install high-tech security features and acquire classroom technology equipment.

The New York State Education Department has provided required elements for the Smart Schools Investment Plan including demonstration of student needs, internet connectivity and network speed requirements, professional development, technical support and sustainability of projects. The Royalton-Hartland Central School District developed the District Instructional Technology Plan and completed the NYSED Technology Survey Tool in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. The Royalton-Hartland Central School District Instructional Technology Plan includes the blueprint for technology integration with curriculum, professional development, infrastructure improvements, hardware upgrades, technical support and methods of evaluation. The District received notification dated January 29, 2016 from the New York State Education Department that the 2015-2018 Instructional Technology Plan was approved.

The Instructional Technology Plan adopted by the District provides goals to utilize funds to further enhance teaching and learning through acquisition of classroom technology equipment. Royalton-Hartland Central School District's vision is to educate students to their fullest potential by providing them with the resources, knowledge, and skills they need to communicate, compete, and contribute as self-sufficient citizens. The commitment to providing access to technology tools to engage learners, support instructional practices and to deliver opportunity for digital literacy proficiency are of principal importance for teaching and learning. School buildings are equipped with classroom desktop computers, computer labs, mobile device carts and some multimedia presentation equipment. Educational software and applications provide a digital learning environment interface to support instruction, curriculum and learning.

The district has consulted with the stakeholders and they have developed this preliminary Smart Schools Investment Plan and seek approval from the Board of Education. This preliminary plan will be posted to the District's website for a minimum of 30 days. The school's mailing address will be provided for those wishing to submit written comments. A public hearing will take place at a future Board of Education meeting that will address responses and receive community feedback. Notice of this public hearing will be provided through local media and the District's website for at least two weeks prior to the meeting. The stakeholders will review feedback and

prepare a final plan for the Board of education to approve. The final approved plan will be posted to the District website and submitted to the New York State Education Department for review.

**IV. ALLOCATED FUNDING PURCHASE PROPOSAL: DEVICES**

The District is pursuing approval for use of \$179,550 of allocated funds in 2015-2016 in the budget category identified in the following chart.

Budget Category	Royalton-Hartland Central School District
School Connectivity	\$0
Connectivity Projects for Communities	\$0
Classroom Technology	\$179,550
Pre-Kindergarten Classrooms	\$0
Replace Transportable Classrooms	\$0
High-Tech Security Features	\$0

- **CLASSROOM TECHNOLOGY**

The District will seek approval for purchases in the classroom technology category for the 2015-2016 school year. The District plans to purchase 70" interactive panels to drive classroom instruction, enhance learning opportunities and improve classroom technology integration. The interactive smart panels will be installed at the elementary, middle, and high school buildings to assist in classroom instruction. Interactive panels that transform into tabletop configurations will be purchased for Pre-K classes to enable students to interact with the technology at their developmentally appropriate level. The remaining panels will be mounted in classrooms throughout the district for instructional and student use.

The interactive panels will replace current projector and screen technology to provide optimal support of mobile device integration and interactivity for teaching and learning. These interactive panels are fully compatible with existing platforms and systems including Chromebooks, iPads, Apple TV, laptops and Microsoft surface tablets. These interactive panels will also provide a seamless interface between desktop computers and use of instructional software including Google classroom, Microsoft Office 365, Schoology, Edmodo, web based instructional resources, digital literacy solutions, digital citizenship initiatives, online assessment readiness, real-time review and formative assessment applications and presentation of student work and instructional materials. The interactive panels will also provide a medium as teachers begin to incorporate more digital content in their curriculum, as well as utilize online learning management systems. These devices will be compatible with our current network infrastructure including hardwire connection to our local area network.

- I. **SCHOOL CONNECTIVITY**

Royalton-Hartland Central School District is not submitting an investment plan for this category at this time.

**II. CONNECTIVITY PROJECTS FOR COMMUNITIES**

Royalton-Hartland Central School District is not submitting an investment plan for this category at this time.

**III. PRE-KINDERGARTEN CLASSROOMS**

Royalton-Hartland Central School District is not submitting an investment plan for this category at this time.

**IV. REPLACE TRANSPORTABLE CLASSROOMS**

Royalton-Hartland Central School District is not submitting an investment plan for this category at this time.

**V. HIGH TECH SECURITY FEATURES**

Royalton-Hartland Central School District is not submitting an investment plan for this category at this time.

**V. STUDENT LEARNING**

The District has implemented technology tools and a wide range of technology resources to improve instructional practices and provide new learning opportunities across all three schools. Technology can be an influential tool for actively engaging learners at all levels. The use of technology tools in the classroom allow teachers to individualize learning and provide differentiated instructional techniques tailored to the needs of each student. Technological tools can help transform learning processes and provide extensions for content, review, collaboration, assessment and access. District staff continually identify achievement gaps and focuses technology implementations to improve these areas. The District Director of Special Education works collaboratively with the technology staff to provide assistive technology tools as needs are determined.

English Language Learners will be provided with specialized interactive applications and learning tools to develop proficiency with this alternative learning interface. District Special Education, Response to Intervention and student management systems will keep instructional staff aware of special needs, individualized education program requirements, interventions and special program initiatives for students. Instructional and identified support staff will be provided with special needs classifications and guidelines appropriate to the services they provide.

Interactive classroom panels will increase student engagement and provide opportunities to enhance differentiated instruction through the provision of simultaneous, multi-touch student manipulation, small group work centers or whole group instruction. Students in need of support can use the interactive panels independently in a format that is challenging yet engaging. Students will be provided with individual support and enrichment through the use of video presentations or interactive applications to help solve problems and provide enhanced, differentiated learning opportunities. The interactive panels purchased will be placed in high needs areas throughout the district. At the Royalton-Hartland Elementary School, interactive panels will be placed in Pre-Kindergarten classrooms, Academic Intervention Services classrooms, and Special Education classrooms. These students will benefit the most from the use of the interactive hardware and software included with the panels. Students within these

classrooms are typically in a small group setting, which will help the teacher differentiate learning for students.

Student personal devices connecting with the interactive panels will support flipped learning initiatives, presentation of work and real-time, formative assessments. The opportunity for integration of blended instructional practices, collaboration and virtual experiences will expand teaching and learning strategies. The contribution of this versatile technology tool will assist in reducing learning gaps and provide ease of access and integration of instructional software resources. Student access to Chromebooks, iPads, laptops, Surface tablets and other tools will provide greater interactivity and learning mechanisms. Students with disabilities will experience increased access in an enhanced learning environment through the versatility of the panel as a collaborative table device or specialized configurations. Technology accommodations will be provided as determined for each student to allow access to physical, behavioral or educational programs and applications required to meet individual needs.

The New York State, Mathematics, Science and Technology Standard 2: Information Systems, states that teachers and students will use a range of equipment and software to integrate several forms of information. Through the use of the software included with the panels, hands-on learning will take place which will allow students to learn in the classroom, while also taking this learning with them back to their general education classrooms. A majority of the students impacted by the integration of interactive panels are visual, hands-on learners. Using the software included, as well as the software the Royalton-Hartland CSD currently uses, teachers will be able to bring this differentiated curriculum to the entire small group they are working with.

The panels will assist in attaining specified goals listed in the Royalton-Hartland Instructional Technology Plan including:

Communication and Collaboration

- Students will use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- Develop a cultural understanding and global awareness by engaging with learners of other cultures.
- Contribute to project teams to produce original works or solve problems.
- Students will engage in communicating with experts or other learners to solve a universal or global problem using a variety of digital environments (i.e. Skype, distance learning, virtual classrooms etc.)

Implementation of classroom interactive panels will expand student learning through access to external learning resources. The Internet compatible interactive classroom panels will allow videos and other multimedia presentations to transparently integrate with instructional practices. The panels will communicate with devices the district currently manages and students can take advantage of personally owned devices and new virtual learning opportunities. The

interactive panels will allow students to collaborate with others, research, collect data, and communicate with experts. This hands-on learning will engage students, and impact not only at-risk students, but also the general education population.

## **VI. COMMUNICATION**

The proposal for classroom technology through the Smart Schools Bond Act will greatly increase capacity for teaching and learning through the facilitation of blended learning, distance learning opportunities, online conferencing and homebound instruction. The purchase of the interactive classroom panels will enhance ongoing communication with students and parents through the implementation of online, digital classroom environments where students and parents can access course descriptions, assignments, grades, content, assessments, presentations, resources and interact with the classroom teacher(s). The facilitation of technology-based regional partnerships can also be fostered through the inclusion of distance learning and blended learning initiatives provided through the panel interface. The interactive panels will provide an engaging experience for virtual fieldtrips, video conferencing, collaborative projects and live announcements throughout the district. The interactive panels allow students to present work to parents and other stake holders. As they are Internet compatible, they would facilitate communication via Skype or other programs such that students and teachers can communicate with regional partners. This is extremely important as this is a rural district and direct communication is limited due to distance. The district is currently working with several higher learning institutions include University of Buffalo, Niagara University and Rochester Institute of Technology to provide higher and advanced learning experiences for our students.

## **VII. PROFESSIONAL DEVELOPMENT**

Professional development is a vital component of the District Instructional Technology Plan and the District Smart Schools Investment Plan. The commitment to provide professional development in a variety of ways allows staff to learn how to utilize technology tools and resources to develop innovative instructional methods. Technology related professional development is offered through a variety of ways on a continued basis throughout the school year and summer months.

Throughout the 2016-2017 school year, interactive classroom panels will be placed in the three buildings at the Royalton-Hartland Central School District. With the installation of the panels, teachers will receive professional development which will allow full use of the interactive capabilities of the panels. In each of the three buildings within the district, there are three technology integration specialists. These three specialists will be fully trained to use the hardware and the software included with the panels. Specialists will hold workshops for each of the areas being impacted by the panels. Pre-Kindergarten teachers will be trained to explore how the panels can be used with young learners. Separate trainings will be held for special education and academic intervention specialists to train those teachers on how to best implement the usage of the panels to maximize student results.

The District works closely with Erie 1 BOCES trainers through the Common Set of Learning Objectives COSER to deliver individual and group training integrating specific technology

tools with curriculum and aligning infused lessons with technology learning standards and digital literacy benchmarks. Professional development opportunities provided through BOCES are made available for all district staff and specialized training opportunities are provided as necessary. The District currently provides technology integration specialists in each building to provide training and support as new technology is acquired and implemented through new funding opportunities. Initial trainings will be completed by the technology integration specialists. This training plan will allow teachers to get the initial training they need, as well as the long-term training. Teachers will continue learning and gathering new ideas and ways to reach students. Professional development release time will be coordinated with staff through the use of substitute teachers and identified professional development conference days for investigation of new technology and specific training. District technology integration specialists, Erie 1 BOCES trainers and Orleans Niagara BOCES technology specialists will assist in the establishment of turn-key trainers in the use of the new interactive panels and develop strategies for curriculum integration and development.

The Royalton-Hartland Central School District will provide time and access for all instructional staff with the means to develop a high level of proficiency with use of interactive panels, software, curricular integration and use of all integrated technology components. Technology turn-key trainers will be provided the opportunity to attend specialized technology conferences, i.e. NYSCATE, to remain current with educational technology trends and resources. Instructional staff will be supported to develop the skills and knowledge necessary to accommodate diverse student population needs. The panels will provide a vehicle to deliver online, on-demand professional development and teleconferencing which will reduce the need to travel to an external location for training classes and meetings.

The following list outlines training topics to be provided for all staff who receive interactive classroom panels in the 16-17 school year. This training will also be made available to all staff in the district and special training sessions for students will also be developed and provided.

- Interactive Classroom Panel Functionality Training
- Snowflake Software to enhance instructional strategies
- SMART Notebook Software lesson plan development
- Microsoft Office 365 & Classroom curricular integration
- Google Drive, Apps & Classroom curricular integration
- Schoology Digital Classroom development
- Classroom mobile device management & integration
- Document Camera training
- Online Safety Awareness & Resources
- Digital Copyright Awareness & Resources
- Digital Content, Video Lessons & Annotation to enhance digital classroom resources
- Instructional Technology Coaching for curricular technology integration development
- Other specific training opportunities for teachers, staff, students and parents as determined

**VIII. CONTACT WITH SUNY**

The Royalton-Hartland Central School District has contacted SUNY Teacher Preparation Programs as required by the Smart Schools Bond Act to request advice on innovative uses and best practices at the intersection of pedagogy and educational technology. The District has been working collaboratively with Niagara County Community College, Niagara University, University at Buffalo and Rochester Institute of Technology on blended learning and P16 college readiness initiatives.

**IX. LOANING HARDWARE TO NON-PUBLIC SCHOOLS**

The Smart Schools Bond Act provides that any district hardware purchases made using Smart Schools Bond Act funds shall be lent, upon request, to non-public schools in the district. All students attending non-public schools are eligible to receive 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). The District does not include any non-public schools at this time.

**X. SUSTAINABILITY PLAN**

The sustainability of any technology related implementation is of chief importance to the Royalton-Hartland Central School District. The District Instructional Technology Plan outlines a five-year design for hardware replacement cycles, maintenance of supportive infrastructure and continued professional development initiatives. The District Instructional Technology Plan goals demonstrate the district's capacity and plan to support recurring costs of use that are ineligible for Smart Schools Bond Act funding. Additional support staff recommendations will be budgeted and planned for to provide proper service and maintenance for the operation of equipment, professional development, technical training, wireless access, building maintenance and other incidental item maintenance or replacement. As technology resources are acquired, updates to the Instructional Technology Plan reflect the long-term replacement strategy of purchased devices and equipment at the end of their useful life with other funding sources.

**XI. DISTRIBUTION, PREPARATION, MAINTENANCE & INVENTORY MANAGEMENT**

Accurate inventory management is critical to effective administration of system and devices. District technology staff maintain a detailed inventory of all technology related items including consumable technology items. This information is accessible to key district staff for review and made available upon request to auditors or school administrators. Classroom technology equipment acquired through the Smart Schools Bond Act will be included in this inventory system.

**XII. CLASSROOM LEARNING TECHNOLOGY SUB-ALLOCATION**

	Sub-Allocation
Interactive Whitepanels	\$179,550
Computer Servers	\$0
Desktop Computers	\$0
Laptop Computers	\$0
Tablet Computers	\$0
Other Costs	\$0
<b>Totals:</b>	\$0

**XIII. EXPENDITURE TYPE**

Allowable Expenditure Type	Item To Be Purchased	Quantity	Cost Per Item	Total Cost
Interactive Whitepanel	Interactive Classroom Panel	30	\$5,985	\$179,550

**XIV. STATEMENT OF ASSURANCES**

As Chief School Officer, I am assuring that the district will operate according to the requirements under the Smart Schools Bond Act, as detailed in the guidance documents located on the NYSED Smart Schools Bond Act website at [http://www.p12.nysed.gov/mgtserv/smart\\_schools/](http://www.p12.nysed.gov/mgtserv/smart_schools/). Specifically, I assure that the District will:

- Make and submit for reimbursement, expenditures consistent with the approved Smart Schools Investment Plan.
- Comply with all Education Law requirements and Commissioner Regulations under Title 8, Chapter II, Subchapter J, Part 155 for capital projects at educational facilities. See: [http://www.p12.nysed.gov/facplan/Laws\\_Regs/8NYCRR155.htm](http://www.p12.nysed.gov/facplan/Laws_Regs/8NYCRR155.htm)
- Comply with all Education Law requirements and Commissioner Regulations, under Sections 3602-e and 3602-ee of Education law and Subpart 151-1 of the Commissioners Regulations for new Prekindergarten classrooms.
- Use such fiscal control and fund accounting procedures as will ensure proper disbursement of, and accounting for, funds under the Smart Schools Bond Act;

- Make reports to the State Education Department as may be necessary to enable the Department to perform its duties under the program.

The District will maintain on file and provide to the State Education Department as requested:

- A detailed accounting of expenditures, including other sources of funding used to support the District's Smart Schools Investment Plan; and
- Documentation to support any variances requested by the district, if applicable; and
- A copy of the Smart Schools Investment Plan approved by the Board of education.