Royalton-Hartland Central School District
Smart School Investment Plan
2019-2020
Classroom Technology #1-1920

Chief School Officer: Superintendent, Dr. Henry Stopinski
Royalton-Hartland Central School District Contact:
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Vision: The technology vision of the Royalton-Hartland Central School District is to educate our 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.

Mission: The mission of the Royalton-Hartland Central School District is to foster learning which will challenge students to meet high standards and become world-ready citizens.

Royalton-Hartland Central School District
SMART School Investment Plan (SSIP) Overview

Person to contact regarding this plan and submission:

Jill Heck, Director of Curriculum, Instruction, Assessment and Technology, Royalton-Hartland Central School District (716) 735-2018
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Royalton-Hartland Smart Schools Technology Plan -
Stakeholder Input:
Technology Committee comprised of:
- Faculty and Staff: Kelly Cousins, Adam Eschborn, Daniel Mault, Christopher Schaus, Christina Henderson, Penny Baize, Kelli Hare
- Students:
- Board of Education Members, Community Members and Parents: Sara Fry, Carrie Choate
- Administration: Henry Stopinski, Gary Bell, Danielle Alterio, Donna VanSlyke, Doug King, Tim Pietrowski, Andrew Lang, Jill Heck
- Erie 1 BOCES Support: Derek Myszka, Michael Wright
- Parent/Community Support: Jason Wilhelm

The estimated number of students and staff that will benefit from this SMART Schools Investment Plan based on cumulative projects submitted to date:
1270 students, **123** faculty and staff

Royalton-Hartland's total allocation of SMART School Bond Act Funds:	$1,197,577 million

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 statewide 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 prekindergarten students, installing 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 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 from the New York State Education Department that the 2018-2021 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 developed this Smart Schools Investment Plan to continue our work toward those goals. The Board of Education approved this plan on December 12th, 2019. This plan was posted to the District's website for a minimum of 30 days. The school's mailing address has been provided for those wishing to submit written comments. A public hearing was held on February 13th, 2020 prior to a Board of Education meeting to address responses and receive community feedback. Notice of this public hearing was provided through local media and the District's website for at least two weeks prior to the meeting. The stakeholders reviewed feedback and prepared 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.

The Goals of the technology plan includes:
ALL STUDENTS TO:
- Meet the intent of the New York State Standards
- Gain proficiency in basic academic skills
- Become technologically literate
- Gather information
- Process information
- Communicate effectively
- Develop thinking skills
- Explore/solve problems

ALL STAFF TO:
- Effectively incorporate the New York State Standards
- Gain technological proficiency
- Expand instructional alternatives
- Gather information
- Process information
- Explore/solve problems
- Communicate effectively
- Develop/expand thinking skills
- Update classroom management methods
- Update instructional management techniques

These goals ensure that the students will meet and exceed the New York State Common Core Learning Standards in all content areas within the Royalton-Hartland Central School District.

Budget Sub allocations by category submitted with this plan are as follows in the table below:

School Connectivity	$0
Connectivity Projects for Communities	$0
Classroom Technology	**$195,364**
Pre Kindergarten Classrooms	$0
Replace Transportable Classrooms	$0
High Tech Security Features	$0
Unallocated Funds	**$165,827**
Tentative Timeline:	
December 2019:	The SMART Schools Plan (SSIP) posted on the District Website for at least 30 days (December 15th, 2019 to January 15th, 2020). Any written comments on the plan should be sent to: **Jill Heck, Director of Curriculum, Instruction, Assessment and Technology** **54 State Street** **Middleport, NY 14105** **jheck@royhart.org**

January 2020:	The District will prepare a final plan for School Board approval. The final proposed plan will be submitted to NYSED and will posted on the district's website.
February 2020:	The School Board will conduct a public hearing that will enable stakeholders to respond to the plan at 6:45pm on February 13th, 2020. This hearing will occur before the scheduled Board meeting, and adequate notice will be given.
February-June 2020:	Time allotted for review by state.
June-August 2020:	The District will then begin to purchase the items that are approved and submit receipts to the State for reimbursement.
August 2020:	Implementing new devices for the opening of school in September 2020.

Plan Allocations

School Connectivity: N/A

Community Connectivity: N/A

Classroom Learning Technology:

1. As a precondition to any purchase of devices using a Smart Schools allocation, a district must increase the number of school buildings that meet or exceed the Federal Communications Commission minimum speed standard of 100 Mbps per 1,000 students. Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.:

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 1000 students to sustain the increase of classroom devices. The Royalton-Hartland Central School District is currently equipped with a high speed of 10 GB LAN and 1 GB WAN access through Erie 1 BOCES.

2. 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 WiFi 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.

Network Infrastructure:

Network Infrastructure including wireless access has been updated over the last three years and a plan to expand the wireless capacity using E-rate funds and potentially capital projects 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 and will adequately support the additional devices proposed in this plan, the upgraded wireless system will proved improved speed and reliability for additional devices acquired in future years. Network traffic is regularly monitored and managed to provide high quality transmission for all devices.

3. 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.

The district plan is currently in compliance through the end of the 2020-2021 school year.

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

The District will seek approval for purchases in the classroom technology category. 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. 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, laptops and Microsoft surface tablets. These interactive panels will also provide a seamless interface between desktop computers and use of instructional software including but not limited to Google Classroom, Microsoft Office 365, Schoology, Smart Notebook, web-based instructional resources, digital literacy solutions, digital citizen initiatives, online assessment readiness, real-time review, virtual field trips, 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 into their curricula, 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.

The implementation of digital classroom solutions for teachers increase the need for student device accessibility. The district currently has some mobile devices, but would like to provide greater access to support the adoption of learning management systems and digital instructional strategies. To support teaching and learning in each school building through provision of mobile computing access for teachers and students, this proposal includes the acquisition of chromebooks, iPads and secure charging stations.

The District will also seek approval for the purchase of devices to enhance our STEAM Curriculum. These new devices will include 3D printers and robotics to be used to support teaching and learning with all applications, being used daily by instructors for computer literacy skill development, digital safety, curriculum delivery and enhanced critical thinking skills to solve real world problems.

5. Describe how the proposed technology purchases will:
a. enhance differentiated instruction
b. expand student learning inside and outside the classroom
c. benefit students with disabilities and English language learners; and
d. contribute to the reduction of other learning gaps that have been identified in the district.

Enhance differentiated instruction
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 allows 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.

Expand student learning inside and outside the classroom
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 including classrooms, Academic Intervention Services classrooms, Special Education classrooms and other identified areas where this technology will improve teaching and learning. 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.

Benefit students with disabilities and ELLs
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.

Contribute to the reduction of other learning gaps that have been identified within the district
The acquisition of additional mobile devices and 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 these versatile technology tools will assist in reducing learning gaps and provide ease of access and integration of instructional software resources. Student access to Chromebooks, iPads, laptops, and other tools will provide greater interactivity, support learning mechanisms and facilitate effective learning management system initiatives and digital classroom implementations. 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. Mobile devices and interactive classroom panels provide alternative and stimulating interfaces to enhance the learning experience for students with specialized learning needs. 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.

6. Where appropriate, briefly describe how the proposed technology purchases will enhance ongoing communication with parents and other stakeholders and help the district facilitate technology based regional partnerships, including distance learning and other efforts.

The 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 and mobile computing devices 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 panel interface. The interactive panels will provide engaging experience for virtual field trips, video conferencing, collaborative projects and live announcements throughout the district. The interactive panels allow students to present work to parents, board members and other stakeholder groups. As they are internet compatible, they will facilitate communication via Skype or other programs such that students and teachers are able to communicate with regional partners. The use of mobile devices for the purpose of communication will become instrumental for access of digital content and resources from any location including the ability to download content for use in an area where Internet may not be available. This is extremely important as this is a rural district and direct communication is limited due to distance. The development of community technology awareness training sessions, adult education programs and student technology fairs to showcase projects and initiatives will be an extension of the instructional devices acquired to communicate and educate parents and community members. The district is also working with several higher learning institutions including Niagara County Community College, Niagara University, University at Buffalo and Rochester Institute of Technology to provide higher and advanced learning experiences for our students.

7. 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).

Professional development is a critical component of the District Instructional Technology Plan and the District Smart Schools Investment Plan. It is offered to the Royalton-Hartland Central School District teachers and staff in an ongoing growth process. Their needs are what drive our professional development offerings. Resources for professional development include:
- BOCES curriculum developers
- Content specialists
- CSLO Technology specialists
- Erie1 BOCES RIC support
- O-N BOCES support
- Webinars
- Trainings from individual companies for hardware and software support
- Turn-key trainings from district staff

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. We offer both building and individual training. Teachers may work in groups in a specific area or on

their own. In addition to these options, we have increased our staff to include a full time district level Technology Integrator. Teachers now also have the opportunity to expand their professional development through working directly with this person on integrating technology including but not limited to Google Apps for Education, Web 2.0 tools and a host of program specific professional development into their instruction.

8. Districts must contact the SUNY/CUNY teacher preparation program that supplies the largest number of teachers to request advice on innovative uses and best practices at the intersection of pedagogy and educational technology.

The Royalton-Hartland Central School District has contacted Bobbie Finocchio, Judith Robertson and Elisabeth Etopio at the University of Buffalo 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, the University at Buffalo and Rochester Institute of Technology on blended learning and P16 college readiness initiatives.

9. Smart Schools Investment Plan that proposes the purchase of technology devices and other hardware must account for nonpublic schools in the district.
There are no non-public schools within our district.

10. 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 the 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.

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 three-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. The District Technology Committee has developed a long-term investment plan strategy for use of Smart Schools Funds and a complementary technology hardware budget to insure sustainability for future maintenance, replacement and expansion cycles for technology equipment to support teaching and learning initiatives. 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.

11. Districts must ensure that devices purchased with SMART Schools Bond Act funds will be distributed, prepared for use, maintained, and supported appropriately. Districts must maintain detailed device inventories in accordance with generally accepted accounting principles.

The Royalton-Hartland Central School District technology department maintains a detailed device inventory. All devices are tagged, recorded, and managed in conjunction with our services received through BOCES. Through the collaborative efforts of our team of Roy-Hart-employed and BOCES service technicians, we keep detailed records of our acquired devices. The business office maintains records of our purchases. Staff members are required to sign a District Acceptable Use Policy and Implementation Guide and all devices are accounted for annually. In addition, we maintain ongoing device repair for all technology devices. Two BOCES-employed IT support personnel maintain devices in good working order, track damages and support distribution and collection as well as additional support we receive through the managed service we purchase through our local Erie 1 Boces.

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 was entered in the SSIP Overview overall budget.

Suballocations:	
Interactive Whiteboards (23@$5158.00)	$118,634.00
Computer Servers	$0
Desktop Computers	$
Laptop Computers	$0
Tablet Computers: (100@$279.31)=$27,931 Chromebooks (100@$309)=$30,900 iPads	$58,831

Other Costs: (100@$14.99)=$149.99 Ipad Cases (100@$25)=$2500 Google Licenses (100x$4)=$400 Jamf Licenses	$17,899
Totals	**$195,364**

Included in Other Costs are licenses and cases for the devices listed in the tablet computer section.

Pre Kindergarten Classrooms : N/A	
Replace/Modernize Transportable Classrooms: N/A	
High Tech Security Features : N/A at this time	

Contact for Comments:

Jill Heck, Director of Curriculum, Instruction, Assessment and Technology
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