



Northeastern Regional Information Center

BOCES Support and Coordination

NYS Smart Schools Advisory Committee

A presentation on the strategic use of
technologies and innovation to advance

K-12 education

July 21, 2014

*Expanding the reach and resources of students, school districts and educational communities
through technology leadership, services and support.*



About NERIC:

- One of 12 regional information centers aligned with the NYS Boards of Cooperative Educational Services (BOCES).
- Partners with seven BOCES across 12 upstate counties.
- Provides comprehensive technology and educational support services to more than 137 diverse school districts.



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Technology excellence & innovation in education today



- ▶ NYS Pathways in Technology Early College High School (NYS P-TECH)
 - Helps fund ten public-private partnerships in each of the state's economic development regions.
 - Designed to prepare students for high-skill jobs in technology, manufacturing and healthcare.
 - Students earn Regents high school diploma *and* associate degree at partnering community college.
 - New model for high school education—students participating with, not just preparing for, college-level coursework.
 - In the NERIC region: HFM & Adirondack P-Tech.



➤ Distance Learning/Virtual AP

- NERIC's Distance Learning helps deliver 100 + classes—from Mandarin Chinese and Nanoscale Science to Broadway Performance—each day.
- Recent upgrades help connect students and teachers across New York.
- Provides remote and ready access to learning in multiple school settings.
- Helps students access Advanced Placement (AP) courses, earning them college credit while in high school.



➔ BH-BL, Colton-Pierrepont Schools: Chromebooks

- Chromebooks help stretch budget dollars while giving students reliable and consistent technology—anytime, anywhere.
- Cost-effective and easy to use.
- Key to success is strategic planning: plan *first* what you want out of an investment; “things & stuff” should follow this planning.

➔ Schoharie CSD: Extended School Day

- Wi-Fi on Tech Valley bus—2:40 per day
- Self-policed bandwidth



▶ Northern NY Robotics Academy at Clarkson University/Massena & Salmon River Schools

- Massena and Salmon River School Districts as partners with Student Projects for Engineering Experience and Design (SPEED) program.
- How technology supports SPEED hands-on, project-based learning in the areas of robotics, high-definition imaging, engineering and experiences for students with disabilities.



▶ Spotlight: Troy City Schools

- District identified need for greater technological depth to accomplish learning objectives.
- Leveraging its relationship with the NERIC—and through careful planning and various engagements—the district has redefined its technology vision for the future.
- The district along with the NERIC is currently engaged in a multi-year plan that will change the course of technology utilization for the students and staff forever.



▶ Project-based & Flipped classrooms

- Recreating traditional learning spaces has allowed for project-based experiences with interactive technology.
- Video capabilities bring outside experiences and experts into schools to support Flipped Classroom methodologies.
- Fosters high-tech and “out of the box” learning environments.



Implementing Smart Schools: opportunities and potential pitfalls



➤ Strategic planning is key

- Strategic planning with end-goal in mind is crucial.
- Determining all a district needs to have in place to support its initiatives—and how to best invest in infrastructure, resources, tools—is key.
- Ensure buy-in from the school community including instructional staff.
- Initial and on-going professional development is essential.
- *Cautionary tale*: decide *first* what you want out of an investment—“things & stuff” should not be the focus.



▶ Leveling the playing field

- Access to needed technology and support varies widely from district to district. Geography, socio-economic make-up, other issues at play.
- Underfunded/under-resourced districts suffering most from “initiative fatigue” due, in part, to rigorous testing and reporting requirements of Common Core and APPR—leaving less time for creative application, learning with technologies.
- Districts lacking “human capital” need to partner with entities that can support strategic planning and help districts bring their creative initiatives into being.



Summation & questions



► Keys to success

- Start with the end goal in mind.
- School stakeholder education and support is key.
- Digital citizenship must become a part of the curriculum *before* handing out devices.
- Invest in infrastructure first.
- Choose professional development and devices that support goals and ensure sustainability.
- Ensure human capital to support students, staff and the devices they will use.
- Lacking expertise and resources, leverage entities that can assist in strategic planning.



Learn more about the support and services we provide to schools:

➤ www.neric.org

➤ www.capitalregionboces.org