



**New Horizons
Regional Education Center**

**Technology Plan
2016-2017 School Year**

New Horizons

Regional Education Center

Five-Year Technology Plan 2016-2017 School Year

Overview:

The New Horizons Regional Education Center (NHREC) comprises five major and distinct educational programs. These programs (New Horizons Governors School for Science and Technology, Career and Technical Education Center, Center for Autism, Newport Academy (ED) and Center for Apprenticeship and Adult Education) have very different technology needs and are addressed in different sections of this plan. The New Horizons Regional Education Center serves the school districts of Williamsburg-James City, Gloucester, Poquoson, Hampton, Isle of Wight, Newport News, and York County, Virginia.



Source: Home Pages Hampton Roads
http://hamptonroads.homehunter.com/hroads/index_map.jhtml

Vision:

New Horizons Regional Education Center will strive to become a state-of-the-art regional educational center nationally recognized as an authority on specialized educational programs and services that support the development of a world class workforce and self-sufficient citizenry.

Mission:

To secure the educational needs of the Peninsula's school divisions, New Horizons will prepare students educationally, technically, and socially according to each student's needs to become productive citizens.

- To train and educate a world-class workforce.
- To challenge and enrich the education of future scientists and mathematicians
- To provide effective educational, vocational, and therapeutic treatment for children and youth with disabilities.

Technology Plan- Stakeholders, Development and Communications

Stakeholders – The NHREC technology plan is developed through the input from a variety of sources and is reviewed and updated each year. The recommendations for technology plan come from the instructional personnel, advisory committees, and respective building and program administrators to include:

Executive Director, NHREC
CTE Principal, Hampton (Butler Farm) Campus
CTE Principal, Newport News (Woodside Lane) Campus
Special Education Director
Governor's School Director
Apprenticeship and Adult Education and Apprenticeship, Director
Network Administrator
Plant Manager

Technology Plan Development

NHREC develops its technology plan by coordinating efforts through its directors and principals. The NHREC technology plan emphasizes the innovative use of technology in instruction, administration and operations within the system. It is used as a tool to articulate specific new and innovative technology projects and programs within NHREC as well as the processes used for planning, developing, testing, and implementing technology. NHREC personnel submit technology plan funding requests for new and existing programs. Any NHREC employee may submit a technology proposal.

Technology Plan Communications

The technology plan is posted on NHREC website. <http://nhgs.tec.va.us/tech.htm>

Technology Vision: To provide leading edge, reliable and secure Internet service to the Programs and Administration of the New Horizons Regional Education Center. To support the integration of technology in to all New Horizons Programs.

Technology Plan Goals:

Curriculum/Instructional Integration: Enhance student learning experiences and outcomes through the integration of technology into the education process.

- Increase student learning through effective integration of technology into all curricula areas. This objective focuses on student learning and on the effective integration of technology in the curricula and instructional pedagogy.
- Utilize technology to manage student and operational data for effective decision making. This objective focuses on teacher and administrators management of assessment and operational data.
- Supplement and/or provide alternative instructional options through the creation of curriculum-specific content, and access to virtual material and courses. This objective will focus on the management of digital content and various on-line instructional options (distance learning, video conferencing, E-Learning, Virtual Schools).
- Deliver on-line course/curriculum options to students in their home high school or other designated satellite locations that minimize student travel to NHREC.
- Prepare students with the 21st Century skills needed to succeed in an increasingly complex information and technology-driven society. This objective focuses on providing all students with communication, technological and research skills.

Professional Development and Training– Enhance instructional delivery and personnel productivity through a systemic technology development plan related to standards, policies, software and hardware.

- Development of instructional personnel to effectively utilize classroom instructional technology (hardware and software). This objective focuses on teaching teachers how to effectively use technology related to curriculum and instruction.
- Development of teachers and educational administrators related to the implementation and integration of On-Line learning. This objective focuses on training personnel in using digital content, video conferencing, virtual courses and distance learning.
- Development of organizational personnel in terms of productivity, management programs, and online services (email, secure shell, etc.). This objective focuses on training regarding e-mail, Windows, Microsoft products, and other management programs.

- Development of organizational personnel regarding technology policies and procedures. This objective focuses on training all staff regarding technology standards and policies.

Technology Support: Technical support will be provided to assure the appropriate implementation of the network, hardware and software necessary to address instructional and operation needs of the organization.

- Provide for a Technology Director responsible for the vision and management of the overall technology system.
- Provide technical support to resolve hardware and software issues.
- Provide technical support related to data base management for effective decision making.
- Provide Technology Curriculum Instructional Specialist (TCIS) to assist teachers to effectively integrate technology and instructional techniques to maximize student learning.

Infrastructure and Connectivity - Electronic infrastructure including software, hardware and network resources providing equitable access across all levels

- Provide access to stable secure network.
- Connect all instructional areas to the Internet.
- Provide secure and cost effective digital data service to all New Horizons Programs and Administration offices.
- Promote and develop online systems and methods to collect, store and distribute information for the New Horizons Regional Education Center
- Meet the requirements of the Child Online Protection Act and the Child Internet Protection Act and the goals of No Child Left Behind.

Educational and Administrative Productivity – Maximize the security, safety and efficiency within the organization.

- Evolve mission-critical systems and applications from legacy platforms to an Internet/web-based structure.
- Establish system wide site licenses for core software applications to ensure version consistency and efficiency in operational support
- Promote a 24-7 learning environment with resources and tools available for students, teachers, parents, and administrators.
- Provide a high speed broadband network to support NHREC's educational initiatives.
- Create and maintain the storage of digital content to support curricula.
- Create and implement data management systems to support effective educational and operational decision making.

Accountability and Results – Utilize technology to assess teaching effectiveness, school improvement plan, IEP's, as well as local, state and federal reporting requirements.

- Utilize Web-based decision-making and reporting to support NHREC school improvement plan, learning teams, and leadership objectives.
- Ensure that data driven decision-making systems support local, state and federal requirements.
- Research instructional effectiveness resulting from integration of technology.

Technology Plan Accountability and Evaluation

The following process and steps outline technology program planning, implementation and accountability within the technology plan:

- Establish Strategic Goals for the system by Board of Trustees, Executive Director, and Leadership team.
- Solicit technology plan proposals, input and content from staff by Principals and Directors.
- The school leadership team and the Technology Plan evaluation committee evaluate project outcomes.
- The technology plan is maintained by the Director of Technology. Yearly updates enable accurate and timely reporting of NHREC Technology Plan to include new goals and objectives.

New Horizons Network:

The Center currently consists of four separate campuses (Butler Farm, Woodside Lane, Kiln Creek Elementary wing, and York Middle School wing). A Gigabit Local Area Network (LAN) with fiber backbone and 54 Megabits Wireless Local Area Network (WLAN by Meru) exists in each campus and a Wide Area Network ties all five together connected by two 15 Megabit and two 5 Megabit services to Internet service. Nine VLANs provide campus to campus connections for Voice Over IP phone service, connection to campus Payroll, Accounting, Zimbra Collaboration Suite and Video Conferencing services. Each instructor and administrator has a computer in his/her office with full Internet service (email, secure shell, WWW). Each LAN/WLAN is managed by an ABMX Quad Quad core (16 cores) server and Cisco routers and Extreme Gigabit switches (POE). Each WLAN is secured with 128bit encryption. Each building on the five campuses has at least one network printer on the LAN/WLAN.

Overview:

Horizonet provides Internet service and support to the 280 plus employees and staff and to the students of New Horizons Regional Education Center. Digital voice telephone service (voice over IP) and full Internet service (e-mail, secure shell and

WWW access and Web pages) are provided to staff and instructors. Horizonet support staff consists of one Network Administrator, one twelve month Database and Computer Support Specialist and one twelve month Computer Support Specialists. Each main campus (Woodside and Butler Farm) is connected to the Internet by a 15 Megabit service. Two other campuses (Kiln Creek and York Middle) are connected to these centers by 5 Megabit service. The Family Crisis Center located in Williamsburg Virginia is connected to the William and Mary Campus network. A unified managed encrypted Meru wireless LAN (WLAN) is installed at all locations. Web pages are provided for the New Horizon's Regional Education Center Programs (www.nhrec.org) and for instructional staff. Security and content filtering are provided by Cisco router firewalls and Dan's Guardian and Untangle software. E-mail service is provided by Google School and Zimbra Collaboration Suite software running on ABMX Servers. Some funding for instructional program Computers is provided through the Virginia Technology Grant program and discount digital service is supported through the E-Rate or Universal Service Program.



CTEC Instructional Technology Plan (Woodside Lane)

GOAL 1:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 2:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 3:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 4:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:



CTEC Instructional Technology Plan (Butler Farm)

GOAL 1:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		

2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 2:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 3:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 4:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:



Newport Academy Instructional Technology Plan

GOAL 1:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 2:

OBJECTIVES (2017):	Completion Date	Budget Required

1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 3:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:



CFA and ED/ID Instructional Technology Plan

GOAL 1:

OBJECTIVES (2017):	Completion Date	Budget Required

1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 2:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 3:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:



THE GOVERNOR'S SCHOOL
for
SCIENCE AND TECHNOLOGY

Governor's School Instructional Technology Plan

GOAL 1:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 2:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

GOAL 3:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY:

Goal 4:

OBJECTIVES (2017):	Completion Date	Budget Required
1.		
2.		
3.		
4.		
5.		

YEAR END SUMMARY: