

CHAPTER 793

**2015-2016 Submission
TECHNOLOGY SERVICES PLAN FOR THE LOWER HUDSON REGION**

**Southern Westchester BOCES
Putnam/Northern Westchester BOCES
Rockland BOCES**

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Section 1: Three-Year Summary

The LHRIC technology and learning plan is comprised of following priority areas.

Year 1: 2015-2016

- Data Quality and Security –
 - We will increase the reports necessary to handle all the new verification elements. New elements will be daily attendance, additional teacher data such as tenure, additional course codes, additional BOCES-reported data, and other data as defined by NYSED for accountability.
 - We will continue to concentrate on increasing the quality of the data in our Data Warehouse and in the source Student Information Systems (SIS). We will continue to use systems (including CERTIFY) to give Districts early warning of State Reporting errors. We will continue to work with the SIS systems to develop early reports for districts to have time to correct the data in their SIS system.
 - As of March, 2015, ten regional information centers have been participating in a project initiated by the Lower Hudson RIC to jointly build a service called “ricOneAPI.”
 - The ricOneAPI Service, launched in 2014-15 fully automates the movement of data from student information systems to subscribing database systems used by districts. Based on a survey of districts in the Lower Hudson Region during 2013, there are well over 100 subscribing database systems. Importantly, the Service is paid for by subscribing database system vendors for the benefit of school districts at little or no cost to districts.
 - ricOneAPI would compete with private companies who over the last 18 months have proven the viability of both the technical and business model employed by ricOneAPI. The key competitive advantage and unique distinction of the RIC’s is their position as districts’ trusted data repository. The Service provides districts with a “community cloud” hosting data they control through their RIC’s.
 - The State Data Validation Service will expand collaboration and work sharing for rule writing, prescription writing and student systems mapping with Mid-Hudson RIC. This is the fourth year of inter-RIC collaboration.
 - Represent our Districts in SED's redesign of the State Reporting Data Collection System. We continue to sit on several state-wide RIC and SED groups to develop data quality standards across the state.

- o Explore and plan to help prevent APPR data quality problems by automating the integration of Student Management Systems with other systems.
- o Continue to automate the integration of Messaging Systems like Connect-ED, and School Messenger and other systems with Student Management Systems.
- o Continue to enable Districts to efficiently comply with the State requirement to use State Test scores in their Progress Reports and Report Cards by automating the integration of eScholar/Level 1 Data Warehouse.
- Data Analysis for Decision Making –
 - o APPR Tools - We will continue to assist districts in storing and reviewing APPR data (Student Learning Objectives, Staff Evaluation, Baseline and Post Tests)
 - o Resources for Teachers- We will include additional resources for teachers as direct prescriptions to improve student learning in deficient areas.
 - o We will evaluate methods to provide data to district administrators and to teachers in simple, visual screens so they can understand the data and take action immediately.
 - o We will explore methods such as Watson Analysis to provide plain language search
 - o PARCC – We will support districts in the PARCC field testing by helping them load student data
 - o Work with all other NY State RICs in developing Common Data Views.
 - o RTTT- We will continue to work with building inquiry teams to design reports that will benefit student learning.
 - o Report Committee – We will continue to meet both formally and informally with our districts to enable us to design better, simpler and more dynamic reports.
 - o We will provide Data Integration Services to assist districts in moving student data from and to Student Management Systems and other associated databases
 - o Data Analysis professional development will continue to help teachers understand all the new data elements that will be collected and how these can be accessed in the Data Warehouse.
 - o Chief Information Officers and District Staff - We will expand the use of social collaborative tools. We will continue our Support and Training for CIO's so they can provide quality data.
 - o We will work with RIC, SED, and Big Five teams to review best practices and the necessary reports for verification of newly required data elements. We will continue to share common reports

across the state that will allow our districts to take action to improve student performance.

- o Interim Benchmark Assessments - We will work with other RICs and NYSED in collecting data from Interim Assessments from Districts
- o Formative and Summative Assessments – We will help districts provide formative and summative assessments as needed and to collect the data for analysis to provide quality assistance and improve student learning
- o We will provide a “Dashboard” that is personalized for Teachers and Administrators to quickly gain insight into the performance and needs of their students.
- o We will continue to enhance our own security and privacy procedures to become compliant with SOC-2 certification and comply with new state legislation.
- o We will work with districts to provide predictive analysis built into the data analysis reporting.
- o We will create a “Day in the Life” video of how teachers are using data to inform instruction.
- Managed, Centralized Technology Support Services –
 - o Research, develop, and bring to our school district consortium new technology support strategies that will automate and centralize remote support processes, while continuing to increase the reliability and access to districts’ current technologies.
 - o Lower district technology support costs by increasing the automation and centralization of technology support services.
 - o Expand managed and centralized remote support technology services\options and increase school district participation within these services.
- Computer Based Testing (CBT) –
 - o Assist school districts with evaluating and selecting current technologies that will successfully meet CBT standards and requirements.
 - o Research, develop and apply technologies, configurations, and strategies that will ensure the safety and security of a reliable CBT environment.
- School Security –
 - o Research, identify, and deliver state of the art technologies that enhance our school districts security postures.
 - o Develop a centralized and automated remote support model for school district security technology implementations that will automatically monitor and spontaneously alert when school security measures have been breached.

- o Expand district participation in the LHRIC managed, centralized, and automated school security technology support services.
- Technology Access and Bandwidth –
 - o Assist school districts in the planning, upgrading, and expansion of their current technologies and bandwidth while substantially increasing student access to technologies and increased bandwidth.
 - o Persistently conduct consortium bids and negotiations with bandwidth providers to continuously reduce school districts access costs.
- Model Schools –
 - o Provide district administrators with strategic and long range planning solutions for instructional technology and assessment using a combination of data analytics and face to face processes.
 - o Continue to build capacity with district stakeholders to build and nurture personal and professional learning through programs that model effective instruction using technology in support of the core standards.
 - o Offer blended learning professional development for faculty and administrators throughout all of the program services.
 - o Continue to support districts in building their capacity to provide 21st Century learning environments.
 - o Deliver specialized professional development strands to support district administrators and other job related cohorts.
 - o Provide comprehensive Summer Institutes for teachers and administrators delivering continuity of learning with districts' professional development goals.
 - o Build capacity to support districts mobile and cloud based personalized learning initiatives.
 - o Collaborate in the Model Schools Statewide efforts in support of key programs, in the development of new services, and NYSED initiatives.
 - o Refine the prototype of Model Schools Core Plus professional development experiences with smaller groups.
 - o Determine the expansion and funding of an expanded coaching model of professional development in support of district instructional objectives.
 - o Develop a comprehensive set of professional development options for districts relative to mobile and personalized learning devices for teachers and students.

Year 2: 2016-2017

- **Data Quality and Security –**
 - Continue to reduce the risk of State Reporting errors, as well as the time and labor constraints faced by our Districts when complying with State Reporting.
 - Research new applications of Rules Validation Engine technology to serve our Districts.
 - Continue the ricOneAPI Service expanding the opportunities for districts to save funds.
 - Continue to author new State Reporting Rules and SIS Prescriptions as promulgated by the State.
- **Data Analysis for Decision Making –**
 - LHRIC Assessment Tool: We will continue to add questions from various sources for our Assessment Tool. Districts build formative/summative assessments and print out the questions/booklets. We have added to this service printed answer sheets, scanning, scoring and posting the results of this information in reports for analysis and archiving.
 - We will develop in conjunction with a vendor, a method of producing the local, interim and formative assessments in an online environment so students can log in and take the assessments directly on a computer or tablet.
 - We will develop a collaborative environment to support best practices in selecting or creating assessment questions
 - We will continue to use predictive analysis models to develop prescriptive reports for teachers to directly improve student learning and performance.
 - We will continue to add multiple sources of data to the data warehouse for taking action to improve instruction for teachers, principals and administrators. This will include College Data and Formative assessments where appropriate.
 - We will look into the addition of unstructured free text data into the data warehouse to better understand students. This free text data can include social media outlets, blogs and other public text.
 - We will continue to support districts in the implementation of the PARCC online testing with data loading of student information for the test administration.
 - We will continue to expand Data Integration Services to assist districts in moving student data from and to Student Management Systems and other associated databases.

- Managed, Centralized Technology Support Services –
 - Continue to research, develop, and bring to our school district consortium new technology support strategies that will further automate and centralize remote support processes, while persistently increasing the reliability and access to districts' current technologies.
 - Further our efforts in lowering district technology support costs by increasing the automation and centralization of technology support services.
 - Increase the expansion of managed and centralized remote support technology services and options. Continue to increase school district participation within these services.
- Computer Based Testing (CBT) –
 - Continue to assist our school districts with evaluating and selecting the best of breed technologies that will allow our consortium school districts to continue to successfully meet CBT standards and requirements.
 - Continue research, develop and apply technologies, configurations, and strategies that will ensure the safety and security of a reliable CBT environment.
- School Security –
 - Continue to research, identify, and deliver state of the art technologies that enhance our school districts security postures.
 - Expand the LHRIC centralized and automated remote support model for school district security technology implementations that continue to automatically monitor and spontaneously alert when school security measures have been breached.
 - Continue to expand district participation in the LHRIC managed, centralized, and automated school security technology support services.
- Technology and Bandwidth Access –
 - Continue to assist school districts in the planning, upgrading, and expansion of their current technologies and bandwidth while steadily inclining increased student access to technologies and bandwidth.
 - Persistently conduct consortium bids and negotiations with bandwidth providers to progressively reducing school districts access costs.
- Model Schools –
 - Assist districts with strategic and long range planning for instruction and assessment using longitudinal data analytics with variety of assessment tools and processes.
 - Build capacity with district stakeholders to develop skills for teaching and learning in using an active learning spaces model.

- o Expand professional development models using data from regional analytic tools across all of the Model Schools services.
- o Support districts as they build capacity and expand their mobile and cloud based personalized learning initiatives.
- o Develop an expanded catalog of blended professional development opportunities for faculty and administrators.
- o Continue to shift delivery of professional development to a more blended approach.
- o Engage districts in building their capacity to provide 21st Century learning environments.
- o Continue to deliver specialized professional development strands to support district administrators and other cohorts
- o Continue to provide immersive Summer Institutes for teachers and administrators to deliver continuity of learning with districts professional development goals.
- o Collaborate Statewide with BOCES and Regional Information Centers to offer key programs
- o Refine and the options for districts relative to mobile and personalized learning devices for teachers and students based on evolving needs.
- o Launch the new criteria for Common Set of Learning objectives that more closely aligns with the contemporary needs of school districts.
- o Formalize the service level agreements in support of professional development with smaller groups of districts based on outcomes from prior year.
- o Based on prior year results, establish a service level agreement that incorporates strategy, implementation and a budget for a coaching model of professional development in support of district instructional objectives.
- o Align all professional development with the Common Core, 21st Century Learning and teacher evaluation criteria such as the Danielson Framework.

Year 3: 2017-2018

- Data Quality and Security –
 - o Continue to reduce the risk of State Reporting errors, as well as the time and labor constraints faced by our Districts when complying with State Reporting.
 - o Research new applications of Rules Validation Engine technology to serve our Districts.
 - o Continue the ricOneAPI Service further expanding the opportunities for districts to save funds.
 - o Continue to author new State Reporting Rules and SIS Prescriptions as promulgated by the State.

- Data Analysis for Decision Making –
 - We will continue to support the three BOCES to improve reporting and data analysis for teachers and administrators. We will create special reports and provide training specifically for their data inquiry teams to help the BOCES students
 - We will work with RICs/SED to provide reports for teachers, and administrators based on course and teacher information, attendance, college data, adult information and any other new appropriate data that will be collected.
 - We will work with districts to develop programs for students in analysis of their own data so they can improve in weak subject areas or skills
 - We will work on Predictive Analysis concepts with districts to provide early-warning systems for teachers and students.
 - We will continue to work on data integration and automation to save time, money and ensure accuracy.
 - Formalize professional development with more collaboration, training and professional learning communities with our Professional Development Centers in the three BOCES.
 - We will work with the districts so most teachers in the region will have access to their students' data in the data warehouse.
 - We will continue to work on sharing across the NYS RIC's exemplar practices for using data to help districts reach their goals with their students.
 - We will start to explore the feasibility of predictive analysis using tools such as SPSS.
 - We will work on incorporating perceptual and narrative data as elements for helping students and teachers.
- Managed, Centralized Technology Support Services –
 - Continue to research, develop, and bring to our school district consortium new technology support strategies that will further automate and centralize remote support processes, while persistently increasing the reliability and access to districts' current technologies.
 - Further our efforts in lowering district technology support costs by increasing the automation and centralization of technology support services.
 - Increase the expansion of managed and centralized remote support technology services and options and continue to increase school district participation within these services.
- Computer Based Testing (CBT) –
 - Continue to assist our school districts with evaluating and selecting the best of breed technologies that will allow our consortium

- o school districts to continue to successfully meet CBT standards and requirements.
 - o Continue research, develop and apply technologies, configurations, and strategies that will ensure the safety and security of a reliable CBT environment.
- School Security –
 - o Continue to research, identify, and deliver state of the art technologies that enhance our school districts security postures.
 - o Expand the LHRIC centralized and automated remote support model for school district security technology implementations that continue to automatically monitor and spontaneously alert when school security measures have been breached.
 - o Continue to expand district participation in the LHRIC managed, centralized, and automated school security technology support services.
- Technology and Bandwidth Access –
 - o Continue to assist school districts in the planning, upgrading, and expansion of their current technologies and bandwidth while steadily inclining increased student access to technologies and bandwidth.
 - o Persistently conduct consortium bids and negotiations with bandwidth providers to progressively reducing school districts access costs.
- Model Schools -
 - o Assist districts with strategic and long range planning for instruction and assessment using longitudinal data and a variety of assessment tools and processes.
 - o Empower districts to build and nurture professional learning communities by modeling in the core and core plus programs
 - o Continue expansion of the coaching professional development model to all offers in the model schools offers.
 - o Provide districts with models and shared experiences as they explore contemporary learning methods and solutions.
 - o Build capacity to support districts mobile and cloud based personalized learning initiatives.
 - o Continue to support districts as they build capacity and expand their mobile and cloud based personalized learning initiatives.
 - o Continue to deliver specialized professional development strands to support district administrators and other cohorts
 - o Continue to provide immersive Summer Institutes for teachers and administrators to deliver continuity of learning with districts professional development goals.
 - o Collaborate Statewide with Regional Information Centers.

- o Continue the work seeded in the EETT grant that focuses on integration of best practices around data and assessment in the classroom, and all instructional services to meet the needs of 21st century classrooms.
- o Refine the options for districts relative to mobile and personalized learning devices for teachers and students based on evolving needs.
- o Launch the new criteria for Common Set of Learning objectives that more closely aligns with the contemporary needs of school districts.
- o Formalize the service level agreements in support of professional development with smaller groups of districts based on outcomes from prior year.
- o Based on prior year results, establish a service level agreement that incorporates strategy, implementation and a budget for a coaching model of professional development in support of district instructional objectives.
- o Determine the effectiveness of having professional development closely aligned with the Common Core, 21st Century Learning and teacher evaluation criteria.
- o Design new assessment metrics for formative and summative feedback relative to professional development implementation in districts and at the LHRIC center.

Section 2: The Regional Planning Process

The Planning Process:

1. The LHRIC is committed to seeking input from consortium constituents to guide the development of its regional plan and services. In an effort to improve services and deepen school consortium partnerships, the LHRIC organized an Advisory Committee. The LHRIC Advisory Committee is a diverse representation of roles and regions; comprised of 19 volunteers across each BOCES region with roles including a BOCES Superintendent, a school district Superintendent, an Assistant Superintendent for Business, an Assistant Superintendent for Instruction and a Director of Technology. The LHRIC Advisory Committee meets three times per year to assist LHRIC future planning. The committee charters representatives to act on behalf of the region's districts and provide input on the direction of the LHRIC and the many critical consortium issues that arise. Relevant information from these meetings is incorporated into the 793 Plan.
2. Each LHRIC service maintains a users' group that provides input into the development of that service over time. This input directly impacts items in the 793 Plan.
3. The LHRIC is in the process of evaluating its annual customer satisfaction survey to all Superintendents, Assistant Superintendents, Business Officials, and Directors of Technology in the region, to determine the best method of collecting this information.
4. The LHRIC participates in a variety of statewide planning groups such as: the Data Warehouse group, the Finance Manager group, Test Scoring group, the RIC Directors Technical Committee, the RIC Directors Committee on Instruction, State Wide RIC Data Structure/Report Committee, Model Schools, the NYS Distance Learning Consortium, etc. Full participation in these groups allows us to have a broader view of the innovations and directions that others are pursuing around the state. Incorporating the feedback and larger horizon that these groups provide into the 793 Plan is an important part of the planning process.
5. The LHRIC continues to rely upon the Regional Coordinator position, as a single point of contact in support of individual district needs. Each Regional Coordinator is assigned to a BOCES region. The Regional Coordinator is tasked to listen to our consortium members and to bring back suggestions and feedback to the LHRIC Director. This information also feeds into the 793 Plan.

6. Four years ago, we instituted a comprehensive, annual, multi-faceted **Consortium Feedback Program** designed to afford key district representatives several forums to express their respective district visions for the future, their plans to bring those visions to fruition, and to indicate how the LHRIC can best play a significant role in supporting those district plans. This initiative includes a three pronged approach to collecting district feedback via the following means: at least 10 unique, face-to-face, user group meetings; the annual customer satisfaction surveys (mentioned above); and an overarching Southern Westchester BOCES online survey primarily designed to collect district input on the cost competitiveness of our services.

Once district feedback data is collected during May and June each year, it's analyzed, with detailed and summary reports subsequently shared among LHRIC staff. Key district suggestions are often immediately implemented or incorporated into the LHRIC's Strategic Plan for future implementation. This **Consortium Feedback Program** affords district staff, at many points of interaction with the LHRIC, opportunities to contribute valuable input toward improving LHRIC services and thereby district satisfaction. This information helps the LHRIC better prepare for future educational technology or application trends in our region.

7. Informally, we elicit as much participation as we can through annual service surveys, district conversations with Regional Coordinators, and feedback from the Technology Leadership Institute (TLI) sessions such as the annual TECH EXPO and TECH Summit – all-day regional K-12, technology conferences where teachers, administrators and the LHRIC learn about the latest technology trends and share best practices among our consortium.

Section 3: Current Context

Mission Statement:

Lower Hudson Regional Information Center

The mission of the LHRIC is to provide regional leadership and to collaborate with school districts and communities to meet their educational challenges by delivering cost-effective, high quality technology services.

Strategic Direction

The Lower Hudson Regional Information Center continues to value its mission to assist school districts in meeting and exceeding the New York State Standards and Assessments and to enable school districts to administer and manage their schools efficiently and effectively. The LHRIC strives to be a “**trusted advisor**” to the districts in the Lower Hudson region.

The LHRIC continues to focus on offering web-based applications to our districts and schools. Whether it is an administrative or an instructional application, the goal of the LHRIC is to make it available to users twenty-four hours a day, seven days a week. This is much easier to accomplish when the software is web based and accessible from any web browser rather than loaded on individual machines. We see this as a change in the delivery method that allows for greater access, while still maintaining the LHRIC support model for these applications that is essential to their success.

LHRIC Model Schools continues to meet the changing needs of the consortium in the ways we design and deliver support around instructional technology and professional development. We also make it easier for districts to keep abreast of the many new services and offerings that are developed by capitalizing on opportunities for formal and informal consortium feedback, remaining flexible and visionary in anticipating new services to meet challenges, and leveraging talent from among the LHRIC’s diverse services.

Our goal is to provide direction for districts and their diverse constituencies. In partnership with industry leaders and the US Department of Education, we guide districts to prioritize technology resources in conjunction with other resources. The strategic approach to planning allows stakeholders to identify their individual and collaborative needs toward supporting the growth of a 21st century educational community. The LHRIC makes the concept of visionary planning a reality within the region.

With the explosion of mobile devices and the inexpensive costs to procure them, schools throughout the region have been adopting them at a rapid pace. These types of devices (mainly consumer based devices) relying solely on either WIFI and/or cellular technologies for connectivity dramatically change the landscape as it relates to the strategies required to employ them within instructional programs and require the LHRIC to redesign some of our technology support services.

The LHRIC is continuing its commitment to slow the growth of technical support costs by continuing to implement and enhance our centralized remote support options. We will continue to look at the trends in technology in order to identify new technologies, which will further automate support. Using various solutions, schools will shift the focus, from technical support, to allocating resources based on the needs of the 21st century classroom.

The LHRIC has developed a comprehensive program to further assist the schools in our region in their preparedness with both their technology implementations, as well as, the human infrastructure professional development required to successfully implement online Computer Based Testing. We have been and will continue, to evaluate the current state of technology within our regions' schools and assist in educating our schools around the practices and processes required to implement CBT.

The LHRIC continues to address regional issues, such as sharing of best practices, the development of new services around strategic instructional products, and cutting edge concepts such as distance education. Our annual Technology Leadership Institute (TLI) provides robust forums for districts to interact with nationally recognized expertise in technology, education, and change-oriented leadership. Districts have access to the expertise, wisdom, and practical experience of the leading technology visionaries of our time. We recognize key teachers, districts, and directors of technology, at the culminating Pioneer Awards Celebration, which remains one of the highest attended of the many LHRIC sponsored events.

One of the strategic areas that will continue to be developed is "Teacher Access and Use of Data for improving student performance". We will continue to work with partners to create building teams and provide analysts to help districts to take action using appropriate data. We will work with other RIC's to develop common data structures and reports for sharing throughout the state. We presently have over 11,000 users including teachers, administrators, and CIOs. We will continue to add teachers to our data analysis service, as well as provide additional resources like LearnZillion.com and nyLearns for their use. We will work with districts to enable them to integrate their systems (Student Information, Special Education, and the Data Warehouse). We will continue to add new data

into the data analysis service including course grades, publisher tests such as SAT, and AP exams. We will work on providing Interim Assessments via the Level 1 Data Warehouse and the Test Scoring department. These Assessments will be part of a State-wide effort by BOCES and RICs for Common Periodic Assessments for large-scale data collection. The data collection will allow districts to compare student answers with state results. We will continue to support all the systems that are required to facilitate the State Wide Data Warehouse including NYSIS (Unique ID) and Level 0. We will continue to work with district administrators to design reports that will help them with APPR requirements. All new required data for example: daily attendance, SLO results, new NCES course codes, adult linking to student data elements, teacher portal access, and BEDS student enrollment reports will be developed to help our districts continue to uphold the high level of data quality to which they are accustomed. We will continue to create relationships with higher education to help them improve their instruction of teachers with the use of sample data sets.

We are working with a CPA firm on a SOC-2 Security and Privacy Audit for the Data Warehouse. We plan to expand this audit to other departments and, using this experience, help districts in planning their own audits.

Our Executive Briefing of State Reporting for CIOs continues to be highly regarded. We will contribute to the FAQs regarding these newly collected data elements and their requirements for accountability. We will expand our education offerings and workshops for newly assigned CIOs and building Administrators. This will help build their skills and assist them in leading their teams, understanding reporting requirements, and analyzing quality data. We will be using additional technology tools to facilitate communication with our clients. We will continue to reach out to teachers to learn how they use their data from our data analysis service in order to improve their use of data to inform instruction.

Districts have asked the LHRIC to help them deal with the many **network security** issues that they encounter. The LHRIC continues to maintain a **firewall** for the region, as well as regional **content filtering**, e-mail **virus scanning**, **intrusion detection**, and basic **spam filtering** solutions. In addition, we maintain security on our **routers** and **file servers** throughout the region, and assist districts in performing **security audits** and provide **digital surveillance**, as well as, facility **access control** solutions.

The LHRIC does not intend to institutionalize BOCES services at their present levels. As an organization, we need to be leading and changing to meet the needs of an evolving market. We continue to take our leadership role seriously, as our districts' shift more of their resources, from hardware to software and staff development. We will continue to invest in the training and re-training of our staff

and those of our Directors of Technology so they can meet the latest technical challenges, develop better customer relationships, and hone leadership skills.

We will continue to focus on improving all of our services so that customer satisfaction will be maintained. We believe the LHRIC technology consortium is strong and that the strategies described in this plan will maintain and improve the use of technology in our region to meet the NYS standards for teaching and learning.

Data Warehousing and Decision Support Timeline:

(Mark Samis – Manager, Data Analysis and Reporting)

Implementation - Phase 1

2015-2016

- Increase the number of districts using Teacher Level Reporting.
- Increase the use of Data Analysis Reports by high school teachers
- Simplify reports using visual presentation of data and/or question and answer modalities
- Develop predictive models based on a number of variables that are district specific
- Increase the number of vendors involved in the ricOneAPI project
- Continue to assist districts in the implementation of PARCC field testing
- Create a video “Day in the Life” of teachers using data to inform instruction.
- Expand the CIO team by including other departments from the school district including Special Education, ELL educators, all subject area teachers and Human Resource professionals.
- Continue to create more reports (both verification and analysis) for the BOCES showing data for their students.
- Increase the use of social media and collaborative tools to create learning communities. Use video conferencing and online training tools for CIOs and teachers.
- Increase the number of opportunities for Pre- and Post- testing and Professional Development Analysis. This will include new reports and six more districts enrolling in this service.
- Increase by five the number of districts using the SLO tool for storage of the 20% Growth or 20% Local SLO.
- Develop a method for reporting Science 4 & 8 scanned extended response answers by students
- Serve on the RIC statewide development committee to develop common data views across the RICs.
- Participate in projects that look at new ways to analyze existing data.
- Add new data domains such as baseline and local assessments for grades K-8 and 9-12. Work with RIC and district teams to strategize the use of assessment data at all levels.
- Continue to work with the new tools to be used to create “Dashboard” reports to visualize data to inform instruction.
- Integrate data from other systems to visualize data for administrators and teachers.
- Continue to work with the NYS RICs on projects that will promote shared services.

- All districts will have access tools to automate training. (Video and online training documents)

Implementation - Phase 2

2016-2017

- Integrate multiple systems to simplify the transfer and increased quality of the data by designing new reports and implementing new systems.
- Continue to expand ricOneAPI to new vendors and districts throughout the state
- Continue assisting districts in the implementation of the PARCC assessments
- Include more districts in utilizing Predictive Analysis Models.
- Develop a method to connect Data Analysis Reports such as the benchmark report and remediation guidance report to a district's Curriculum Mapping program.
- Continue to support new training programs – Continue to support data teams in districts and BOCES to inform instruction.
- Increase the participation of the Report Committee to include five elementary and high school teachers in the core subject area for the sake of designing cohort reports for all user levels. Also include other subject area teachers to better understand the needs of this new group of teachers.
- Design and implement a service using formative assessment tools with Model Schools' team members.
- Include school districts in the planning for a Regional Teacher Data Analysis service (all districts) and prepare a budget that encompasses all analysis services into one.
- Start to build out and develop an Assessment Tool to provide more online assessments

Implementation - Phase 3

2017-2018

- Help districts include possible online testing services to assist with SED's suggested plan.
- Work with teacher groups across districts to provide better communication of best practices.
- Include more districts in utilizing Predictive Analysis Models.
- Use technology to offer school districts best practices for lesson plans using Video with the Model Schools Group.
- Develop methods of displaying school data through Geographic Information Systems (GIS)
- Provide reports for students that have been designed by teachers to enhance their knowledge of the students' own assessment results.

- Provide new sources of formative assessment questions linked directly to reports
- Develop methods of plain language and audio query for data analysis
- Reports will be provided in new online formats so teachers and administrators can directly query in a simple way.
- We will provide information directly to teachers to help them differentiate instruction at the beginning of the year and align this with their district resources and with district personnel.
- Work with districts/vendor to continue to improve the online Assessment Tool

Model Schools Timeline:

(Sarah Martabano – Manager, Instructional Technology Services)

Implementation - Phase 1

2015-2016

- Build professional development strands that model district implementation of instructional technology professional learning communities.
- Expand face to face, blended and fully online professional development offers throughout the region that increase access to and participation in professional development opportunities.
- Design on line professional development offers for teaching and learning in a blended learning environment.
- Form a collaborative partnership for extended professional development opportunities with selected industry and BOCES partners.
- Design a strong correlation between common core curriculum, teacher evaluation strands and the professional development offers.
- Build targeted collaborative projects with other Statewide Model Schools and BOCES/RIC partners
- In support of district initiatives for teaching and learning, further develop offers to promote the development of of 21st Century Skills and mobile learning environments.
- Provide options for districts to provide formal and informal review and assessment of Model Schools' offers.
- Develop partnerships with key strategic solution providers.
- Expand regional Summer Institute offerings.
- Collect feedback from districts about realistic high priority needs for professional development.
- Develop a virtual coaching model and select associated technology to support the on demand learning needs of teachers.

- Based on professional development prototypes and data analysis of districts technology implementations, design flexible options for consortium participation.
- Test a variety of professional development coaching models with districts.

Implementation - Phase 2

2016-2017

- Evaluate the results from the exploratory and prototype professional development programs in phases 1 and update or revise associated plans to reflect the outcomes.
- Continue seamless integration between TLI and Model Schools
- Expand regional face-to-face, blended, and fully online professional development offers that increase access and participation in professional development.
- Continue and expand collaborative partnerships for extended professional development opportunities with selected industry partners.
- Design professional development offers in support of computer-based assessment.
- In support of district initiatives for teaching and learning, further expand offers that promote the development of 21st Century Skills and mobile learning environments focused on common core standards.
- Evaluate needs for professional development of a variety of stakeholders relative to computer-based assessment.
- Continue to identify meaningful collaborative projects with other Statewide Model Schools programs via the RIC to RIC network.
- Continue to refine Model Schools to achieve progressive innovation in professional development, technology planning, and expand digital learning opportunities for teachers and students.
- Evaluate the participation in virtual and core coaching models for cost and effectiveness.
- Host end of year meeting with districts to review current Model Schools' services.
- Develop partnerships with key solution providers.
- Expand regional Summer Technology Institute offerings.
- Formalize a variety of professional development coaching models with districts.

Implementation - Phase 3

2017-2018

- Redesign models based on the results from the exploratory and prototype professional development programs in phases 1 and update or revise associated plans to reflect the outcomes.
- Continue to expand and refine regional Summer Technology Institute offerings focused on common core standards.
- In support of district initiatives for teaching and learning, build a continuous improvement plan for professional development around programs that support of 21st Century Skills and mobile learning environments focused on common core standards.
- Expand and enhance blended learning opportunities.
- Continue to refine Model Schools to achieve progressive innovation in professional development, technology planning, and expand digital learning opportunities for teachers and students.
- Establish and maintain meaningful collaborative partnerships with other statewide Model Schools programs via the statewide network.
- Continue collecting feedback relative to client satisfaction with the participating consortium members.

Technology Leadership Institute Timeline:

(John Hall – Regional Coordinator)

Implementation - Phase 1

2015-2016

- Coordinate and deliver/attend (7) sessions focused on educational technology issues including a regional Tech Expo and TECH Summit to foster sharing best practices among teachers, administrators, and directors of technology.
- Plan and deliver the annual Pioneer Awards conference.
- Evaluate the success and modify the Technology Leadership Institute via an annual customer satisfaction survey.

Implementation - Phase 2

2016-2017

- Continue to coordinate and deliver/attend (7) sessions focused on relevant educational technology issues including a regional Tech Expo to foster sharing best practices among teachers, administrators, and directors of technology.
- Continue to plan and deliver the annual Pioneer Awards conference.
- Continue to evaluate the success and modify the Technology Leadership Institute via an annual customer satisfaction survey.

Implementation - Phase 3

2017-2018

- Continue to coordinate and deliver or attend (7) sessions focused on relevant educational technology issues including a regional Tech Expo to foster sharing best practices among teachers, administrators, and directors of technology.
- Continue to plan and deliver the Pioneer Awards conference.
- Continue to evaluate the success and modify the Technology Leadership Institute via an annual customer satisfaction survey.

Managed, Centralized Technology Support Services:

(Robert Predgo – Manager, Technology Support Services)

Implementation - Phase 1

2015-2016

- The LHRIC Technology Support service continues to evaluate and incorporate new technologies to supplement the current support model with managed, centralized technology remote support capabilities.
- Provide consortium school districts with technology support proposals which include managed, centralized technology remote support options.
- Continue deploying a managed, centralized technology remote support model on behalf of our school districts.
- Record, analyze, and publish the results of our centrally managed and automated technology support offers highlighting the cost savings and value of the model for our school districts.

Implementation - Phase 2

2016-2017

- The LHRIC re-evaluates both the Technology Support model and its cost effectiveness for our consortium school districts.
- Obtain commitments from additional districts with our support offers.
- Organize mini-consortia to evaluate the effectiveness of our managed, centralized technology remote support model.
- Explore after hours support and help desk for remote access users with the mini-consortia.

Implementation - Phase 3

2017-2018

- Evaluate the major tasks completed in phases 1 and 2 and update or revise the plan to reflect the accomplishments.
- The LHRIC re-evaluates Technology Support pricing model and costs.

Computer Based Testing (CBT):

(Robert Predgo – Manager, Technology Support Services)

Implementation - Phase 1

2015-2016

- The LHRIC Technology Support services will continue to evaluate and incorporate new technologies within our school districts that meet the standards for successful computer based testing (CBT)
- Record, analyze, and publish the results of our school districts CBT experiences and execute modifications to our support program that will enhance our school districts ability and capacity to conduct successful computerized testing.

Implementation - Phase 2

2016-2017

- The LHRIC re-evaluates both the CBT Support model and its cost effectiveness for our consortium school districts.

Implementation - Phase 3

2017-2018

- Evaluate the major tasks completed in phases 1 and 2 and update or revise the plan to reflect the accomplishments.
- The LHRIC re-evaluates Technology Support pricing model and costs.

School Security:

(Robert Predgo – Manager, Technology Support Services)

Implementation - Phase 1

2015-2016

- The LHRIC School Security Support service will continue to keep abreast of the latest technological advancements that will enhance our school districts current security posture and make appropriate recommendations for our consortium.
- Provide consortium school districts with school security technology support proposals that will further improve automated alerting when there is a breach to our school district security posture.

Implementation - Phase 2

2016-2017

- The LHRIC re-evaluates both the School Security Technology Support model and its cost effectiveness for our consortium school districts.
- Obtain commitments from additional districts with our support offers.

- Organize mini-consortia to evaluate the effectiveness of our School Security Technology Support model.

Implementation - Phase 3

2017-2018

- Evaluate the major tasks completed in phases 1 and 2 and update or revise the plan to reflect the accomplishments.
- The LHRIC re-evaluates Technology Support pricing model and costs.

Technology and Bandwidth Access:

(Robert Predgo – Manager, Technology Support Services)

Implementation - Phase 1

2015-2016

- The LHRIC will continue to engage in the bidding process on behalf of our schools in order to continue to lower bandwidth costs and improve overall bandwidth access.
- Continue to deliver and improve upon safe bandwidth usage through the use of our consortiums centralized CIPA compliant filtering.

Implementation - Phase 2

2016-2017

- The LHRIC re-evaluates both the Technology Support model and its cost effectiveness for our consortium school districts.
- Obtain commitments from additional districts with our support offers.
- Organize mini-consortia to evaluate the effectiveness of our Bandwidth (internet) Technology Support model.

Implementation - Phase 3

2017-2018

- Evaluate the major tasks completed in phases 1 and 2 and update or revise the plan to reflect the accomplishments.
- The LHRIC re-evaluates Technology Support pricing model and costs.

Section 5: Evaluation

Annual Summary (prior year accomplishments):

Progress has been made in all areas. Of special note are the following:

- Data Analysis – LHRIC has continued to add new districts to the data analysis service. We have forty-nine school district members. We have implemented Teacher Level Reporting in 26 districts. Teachers can see just their students' data and work with 21 teacher level reports that have been specifically designed by the school district. Over 2,000 teachers have been trained to access this information and use nyLearns and other resources. We have created new Guided Analysis reports that can help teachers improve learning for their students. We have added new benchmark reports for our clients that use our Regents Scoring Service. We had over 165,000 students' regents exams scored with approximately 63% scored electronically. We now have performance reports for all administered Regents. We created a database for questions and presently we have included 3-8 ELA and Math questions. We now have an Assessment Tool project with five districts. We are creating pre-tests through this system to prepare for the state exams in spring 2014. Districts have access to the questions and can print out their own booklets. We are also doing benchmark reports using the prior information from that particular state exam. We can print the answer sheets, scan and score for the districts within 48 hours. Districts also have the ability to add their own questions.
- State Reporting – We continue to assist districts with the collection of teacher, course, and course grade data. We also continue to offer reports that our district report committee recommended for verification purposes. We meet quarterly with this very important group.
- Managed, Centralized Technology Support Services - Since the inception of Managed, Centralized Technology Support Services, to date 12 districts have signed up for one or more of the following options, Managed Print Services, Mobile Device Management, Centralized Digital Signage, or Remote LAN Support. We continue to see the trend in the support industry grow in this area and will use the data we collect while delivering centrally managed support options with the current subscribers to this service, to ground and substantiate the value and cost savings potential during the user group meetings we host throughout the year
- School Security - To date we have has 10 school districts enroll in our school security service. With additional funding coming through to our school districts via the Smart Schools Bond of 2015, we anticipate the number of schools enrolled within this service to more than double over the next two years.

- Technology and Bandwidth Access – With the technology industry rapidly growing in the area of anywhere anytime learning capabilities utilizing internet hosted services (Cloud (both private and public)), the requirements for Technology Access and Bandwidth has quadrupled over the last couple of years and currently in our region we have assisted over 2/3's of our school districts nearly double their access in bandwidth capacities. We expect this trend to continue.
- Success in shaping the Model Schools program into a consortium based, value added service has been significant. Areas of particular interest are:
 - The Model Schools website accommodated more knowledge sharing across the consortium; specifically, the inclusion of a Twitter feed, RSS, blogs, podcasts, Facebook, and video on demand to make information and session archives immediately available to member districts, and to invite their participation into the development of these tools.
 - Through the Model Schools program the LHRIC showcased key instructional technologies to the region in a forum conducive to group discussion and shared decision-making.
 - LHRIC Model Schools continued to focus on the importance of strategic planning. The Model Schools staff worked with districts to form a strategic framework for technology planning and assisted with thorough instructional technology evaluations.
 - Through Model Schools, the LHRIC offered high level, multi-day Summer Institutes that recruit talent from all over the region and country. Institutes are designed with district feedback.
 - Model Schools invested in an internal audit of instructional services conducted by an outside evaluator, with the intention of grounding service related decisions in focused district feedback.
 - The Model Schools program continued to strive for simplicity and flexibility in providing professional development solutions for districts; to this end we have delivered instructional webinars and continue to support full online registration for events, meetings and seminars.
 - The LHRIC Model Schools Team has made improvements toward evaluating the effectiveness of our services by adjusting our metrics and data collection to reflect the “value add” of our services.

Evaluation Plan for the coming year:

The objectives listed in this plan will be continuously monitored and evaluated to ensure that the LHRIC is on target to complete them as scheduled. Adjustments will be made as necessary to ensure the success of the plan.

The process that we will use to monitor these objectives will be:

1. The use of the standard LHRIC metric process as described in Appendix 7
2. A review of the actual implementation schedules that are developed and the monthly benchmarks that are established by the each service area manager.
3. The LHRIC will review the actual results in each area and use this information to judge the success of the plan.

Assurance of Cooperative Planning

I assure that my BOCES participated fully in the development of this regional plan to provide technology services for addressing the priority needs of school districts.

Signatures of Participating BOCES District Superintendents

BOCES Served:

Southern Westchester BOCES

Putnam/Northern Westchester BOCES

Rockland BOCES

District Superintendent Signatures:

Dr. Harold Coles

Dr. James Langlois

Dr. Mary Jean Marsico

Section 7: Assurance Form 2

Assurance of Cost-Benefits of New Technology Services and Cost-Effectiveness of Existing Services

The proposed new technology services must be analyzed to determine the cost-benefits of providing these services on a regional basis. All BOCES District Superintendents must sign Form 2 assuring that the new technology services had their cost benefits examined and that the cost effective template process, as required by the 1999 legislation, was followed within their regions. I assure that:

- The new technology services provided to the school districts in the region as described in this plan have been reviewed for their cost-benefits.
- The cost effectiveness template process, as required by the 1999 legislation, was followed for all new technology purchases.
- I had the opportunity to participate in the budget review process.

BOCES Served:

Southern Westchester BOCES

Putnam/Northern Westchester BOCES

Rockland BOCES

District Superintendent Signatures:

Dr. Harold Coles

Dr. James Langlois

Dr. Mary Jean Marsico

Section 8: Applications/Services

Information regarding applications and services should be provided using the format, the common metric, Co-Ser numbers and categories mutually agreed to by the RIC Directors and the Department, and updated to reflect any changes for this Regional Information Center. All applications and services provided in the 7710 and 6360 Co-Ser's should be included, indicated by number.

Southern Westchester BOCES/Lower Hudson Regional Information Center offers the following services:

- **Co-Ser 5877, Distance Learning**
 - PSN 444 includes academic instruction for districts using interactive technologies
- **Co-Ser 6360, Instructional Technology Service**
 - PSN 510 includes computer based learning for districts as well as classroom networking, hardware repair, student assessment tools
- **Co-Ser 6313, Printing**
 - PSN 525 includes centralized printing to support learning in districts
- **Co-Ser 6368, Model Schools**
 - PSN 554 includes professional development and planning for districts to apply instructional technologies in classrooms. Activities include planning, curriculum development, staff development and evaluation, Educational Leadership and planning of deployment of emerging technologies.
- **Co-Ser 7710, Computer Service: Management**
 - Includes computer based services using either central or distributed processing for fiscal management, state reporting, or educational management activities including but not limited to: pupil data, personnel data, scheduling, accounts payable, fixed asset accounting, test scoring, data warehousing and educational management services to school districts, non-public schools, and public agencies
 - PSN 611 includes all Regional applications and network functions
 - I. Administrative Support and Training
 - II. Network Services
 - III. Student Management Services
 - IV. Financial Management Services
 - V. Web Design and Application Hosting
 - VI. Data Warehousing Services and Hosting
 - VII. WAN/Internet Services
 - VIII. Test Scanning and Reporting
 - IX. AV & Hardware Repair
 - X. School Security Services

- Co-Ser 7420, Telephone Interconnect
 - PSN 612 interconnect service between individual school districts and BOCES including WATS lines.

The Western New York RIC in cooperation with SED maintains this section. It is a profile of all of the RIC's and their supported hardware and software.

[Section 8 Chart](#)

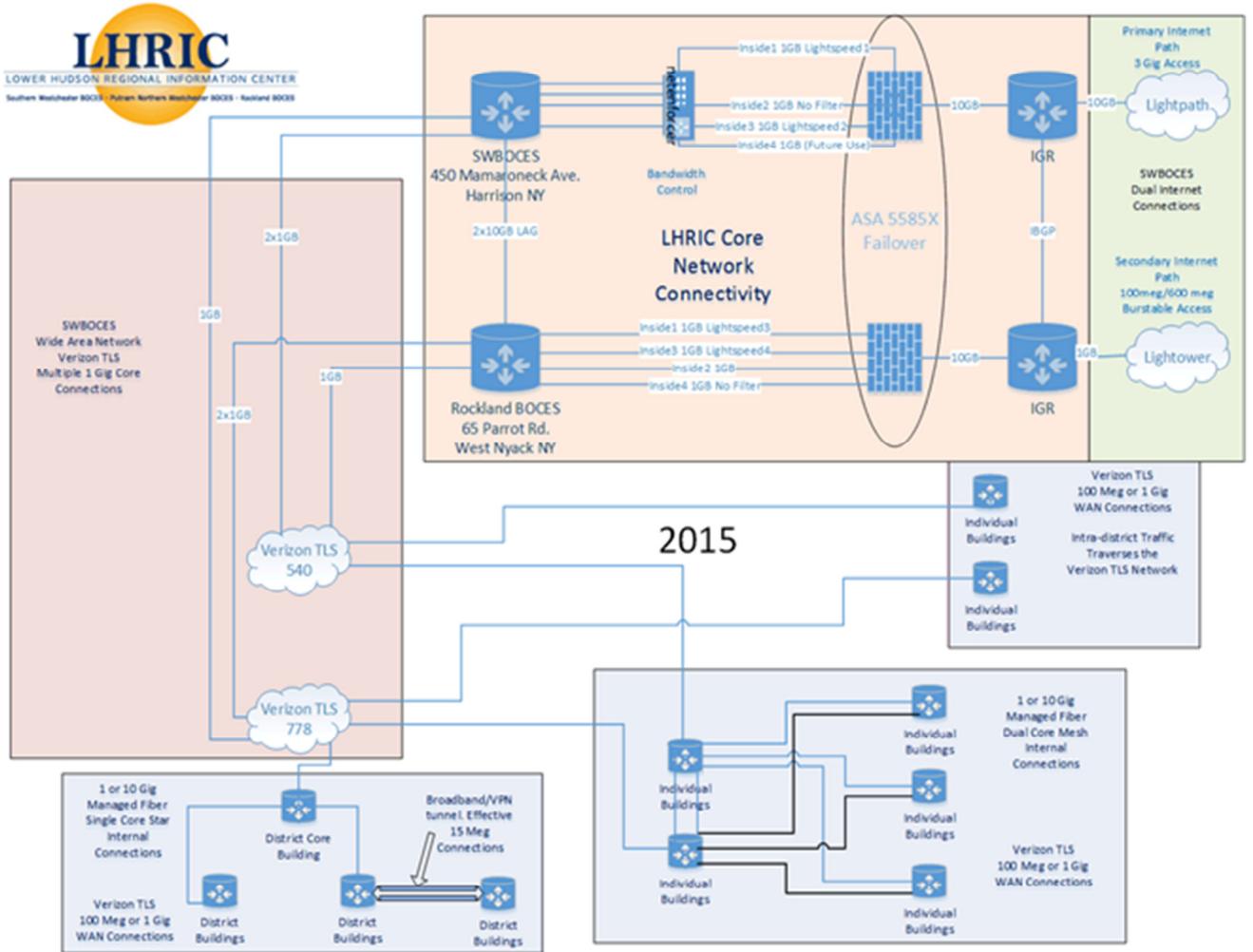
Appendix 1: Hardware

Appendix 2: Software

Appendix 3: Online Applications

The above three items are included within the RIC profile in Section 8.

Appendix 4: Network(s)



Appendix 5: Finances

[Southern Westchester Services Guide](#)

[Southern Westchester Budget Book](#)

Appendix 6: Other

The LHRIC metrics process:

The mission of the LHRIC is to provide regional leadership and to collaborate with school districts and communities to meet their educational challenges by delivering cost-effective, high quality technology services.

In order to achieve our mission the LHRIC holds itself accountable in three areas:

1. Do the school districts perceive of the LHRIC as an organization synonymous with excellence?
2. Does the LHRIC meet or exceed specific quality standards for each service it provides?
3. Do the employees of the LHRIC feel it is a satisfying place to work?

In order to measure our schools' perceptions of the LHRIC, we administer a survey to all Superintendents, Assistant Superintendents of Instruction, Business Officials, and Directors of Technology. We believe that in order to meet our goal to become the first place our schools turn for technology solutions and expertise; we must work to maintain and improve the overall performance and perception of the LHRIC.

To insure we provide high quality services we measure our daily performance against a set of standards created by our staff with input from our customers and approved by the LHRIC Advisory Committee. Each service has its own set of standards and uses its own method of collecting data on the success of the staff in meeting those standards.

Finally, we measure the satisfaction levels of our staff because we believe that in order to provide quality services we must have a staff that is satisfied with its work and its working environment. We believe demoralized and unhappy staff will provide low levels of service to the schools.

Internally, measuring our performance provides us with a continual source of feedback for improving our services. It also helps us work more closely with our employees to create an environment that leads to high quality performance.

Externally, our metrics provide us with a way to ground assessments regarding our success in achieving our mission. It is our goal someday to be able to report, "Ninety percent (90%) of the school administrators in the region indicate that the LHRIC is an outstanding organization and provides leadership through cost-effective, high quality technology services."

The LHRIC Report Card

[LHRIC - Executive Director's Survey](#)