

High Plains Regional Education Cooperative

Strategic Technology Plan

June, 2012 – June, 2015



High Plains Regional Education Cooperative
R. Stephen Aguirre, Executive Director
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High Plains Regional Education Cooperative #3
Technology Plan 2012-2015

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**High Plains Regional Education Cooperative #3
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Board of Directors' Approval and Support

**High Plains Regional Education Cooperative #3
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April 17, 2012

To: Mr. R. Stephen Aguirre, HPREC Executive Director

Subject: Approval and Support for the High Plains Regional Education Cooperative's Strategic Technology Plan

The HPREC Board of Directors has reviewed the proposed strategic technology plan and is in full accord and agreement with the contents and direction of the plan. It is our belief that technology is an important component in student learning and effective instruction. We commit to efforts to provide and enhance digital-age technologies.

Furthermore, we acknowledge that the New Mexico adopted academic standards are the foundation for learning and that the application of technology in instruction to reach the New Mexico standards must be seamless.

The HPREC Strategic Technology Plan complies, to the best of our knowledge, with criteria established for state approval, for E-Rate funding, and in accordance with safety guidelines.

This technology plan was approved and adopted by the HPREC Board of Directors on April 17, 2012.



Mr. Jack Wiley
HPREC President, Board of Directors

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PLAN TERM: Begins: June 2012 Ends: June 2015

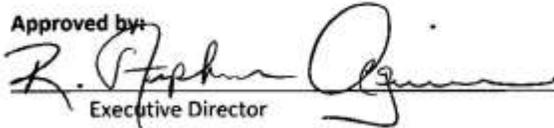
The submitting district/charter (check all that apply):

- is compliant with the provisions of the Children's Internet Protection Act (CIPA).
- will be CIPA compliant by <insert date>. Keep in mind that your district is not eligible for funding if they are not CIPA compliant.
- will apply for E-Rate discounts for the current fiscal year.

Date the plan was approved by the HPREC Board of Directors: 04/17/2012

*Attached are the Board Meeting Minutes – See Appendix B

Approved by:


Executive Director

4-17-2012
Date of Signature

Printed Name and Title: R. Stephen Aguirre, Executive Director

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Consortium Technology Coordinators/Contact s

High Plains Regional Education Cooperative #3
Technology Plan 2012-2015

Names: Dana Gray; Marisa Aguirre	Telephone #: (575) 445-7090
Address: 101 North Second Street, Raton, New Mexico 87740	E-mail: dgray@hprec.com ; maguirre@hprec.com

EXECUTIVE SUMMARY

High Plains Regional Education Cooperative (HPREC) is located in Raton, New Mexico. HPREC is one of nine regional education cooperatives in New Mexico and provides services to eight school districts in Colfax, Union, and Harding Counties.

HPREC provides a comprehensive array of support to school districts in rural northeastern New Mexico. With decreasing enrollment, limited budgets, and increasing demands for academic achievement, it is essential that rural schools collaborate, maximize funds, and share resources and knowledge to meet the needs of all learners. Technology offers a means for rural schools to overcome some of these challenges.

Using efficient delivery strategies, HPREC saves school districts dollars by using a cooperative system of sharing services and programs. HPREC provides two types of services. First, HPREC provides services that are best managed on a regional basis either because they are too costly for an individual district to support, or because resources within a single district are limited. Thus, HPREC provides quality professional development, technical assistance, support, and services to member districts that may otherwise be cost prohibitive. Secondly, HPREC engages in entrepreneurial activities to secure additional funding to support ongoing services to member districts.

High Plains Regional Education Cooperative has both expanded and refined its technology-based service offerings since the previous technology plan was last drafted and certified. We have shifted our focus from a site-by-site technology service provider to an infrastructure-based service provider for our consortium members. Due to the infrastructure approach, this technology plan focuses on the technology systems, methodologies, and initiatives that affect our member districts as a whole, rather than the individual school sites. This approach allows us to assist our member districts to achieve success in their individualized leveraging of internet, video, and access-based technologies across their respective districts.

This technology plan also serves as an overlay or higher level technology plan that can be used in conjunction/augmentation to our member districts' existing technology plans, as many of them are dependent upon the infrastructure services and support that HPREC provides them on a day-to-day basis.

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MEMBER DISTRICTS

Cimarron Municipal Schools
Superintendent: Mr. James Gallegos
PO Box 605
Cimarron, New Mexico 87714
(575) 376-2445 (575) 376-2442 FAX

Mosquero Municipal Schools
Superintendent: Mr. Bill Ward
PO Box 258
Mosquero, New Mexico 87733
(575) 673-2271 (575) 673-2305 FAX

Clayton Municipal Schools
Superintendent: Mr. Jack Wiley
323 South Fifth
Clayton, New Mexico 88415
(575) 374-9611 (575) 374-9881 FAX

Raton Public Schools
Superintendent: Mr. David Willden
PO Box 940
Raton, New Mexico 87740
(575) 445-9111 (575) 445-5641 FAX

Des Moines Municipal Schools
Superintendent: Dr. Tena Hoyle
PO Box 38
Des Moines, New Mexico 88418
(575) 278-2611 (575) 278-2617 FAX

Roy Municipal Schools
Interim Superintendent: Mr. Tom Sullivan
PO Drawer 430
Roy, New Mexico 87743
(575) 485-2242 (575) 485-2497 FAX

Maxwell Municipal Schools
Superintendent: Dr. Chuck Harrison
PO Box 275
Maxwell, New Mexico 87728
(575) 375-2371 (575) 375-2375 FAX

Springer Municipal Schools
Superintendent: Dr. Gregg McMann
Springer, New Mexico 87747
(575) 483-2482 (575) 483-2387 FAX

High Plains Regional Education Cooperative is governed by an eight-member Board of Directors consisting of the Superintendent from each member district. The public is invited to attend HPREC Board meetings.

Chairman

Jack Wiley, Clayton Municipal Schools
323 South Fifth, Clayton, New Mexico 88415
(575) 374-9611 (575) 374-9881 Fax

Vice Chairman

Bill Ward, Mosquero Municipal Schools
PO Box 258, Mosquero, New Mexico, 87733
(575) 673-2271 (575) 673-2305 Fax

Secretary

James Gallegos, Cimarron Municipal Schools
PO Box 605, Cimarron, New Mexico 87714
(575) 376-2445 (575) 376-2442 Fax

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Members

Dr. Tena Hoyle, Des Moines Municipal Schools

PO Box 38, Des Moines, New Mexico 88418

(575) 278-2611 (575) 278-2617 Fax

Dr. Chuck Harrison, Maxwell Municipal Schools

PO Box 275, Maxwell, New Mexico 87728

(575) 375-2371 (575) 375-2375 Fax

David Willden, Raton Public Schools

PO Box 940, Raton, New Mexico 87740

(575) 445-9111 (575) 445-5641 Fax

Tom Sullivan, Roy Municipal Schools

PO Drawer 430, Roy, New Mexico 87743

(575) 485-2242 (575) 485-2497 Fax

Mr. Gregg McMann, Springer Municipal Schools

PO Box 308, Springer, New Mexico 87747

(575) 483-2482 (575) 483-2387 Fax

TECHNOLOGY COMMITTEE

Member	Title	Constituency Represented
R. Stephen Aguirre	Executive Director	HPREC
Dana Stoltz Gray, PhD	Director of Programs	HPREC
Marisa Aguirre	Education/Program Specialist	HPREC
Richard Nunez	Technology Consultant	N-Corp Services LLC
Harvey Lindsay	IT Personnel (Contracted)	

VISION STATEMENT

High Plains Regional Education Cooperative's Vision Statement

We envision a collaborative culture where people are valued and encouraged to grow professionally in a positive working environment, which fosters innovation in a progressive attempt to transform education and provide our clients with high quality, research-based educational opportunities to improve outcomes.

The High Plains Regional Education Cooperative Technology Vision Statement

We envision a dynamic learning environment in which the tools of technology significantly improve teaching and learning for all High Plains Regional Education Cooperative's districts and communities.

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In order to accomplish this vision, High Plains Regional Education Cooperative maintains that:

- High Plains Regional Education Cooperative must take a leadership role in educational technology to:
 - Promote equitable access across the region regardless of geographic location or demographics
 - Provide technical assistance and support to: (a) acquire of the tools of technology, and (b) provide ongoing training, mentoring, and coaching
 - Facilitate data transfer between HPREC and member districts
- Ensure effective use of technology in High Plains Regional Education Cooperative’s member schools to:
 - Maximize limited financial resources through cooperative innovation
 - Enhance the investments that have already been made in technology
 - Provide educational equity throughout the consortium
 - Provide the widest possible access to all information resources
- The tools of technology need be used in creative and innovative ways to:
 - Increase teacher learning and effectiveness
 - Augment delivery of therapies
 - Increase academic and behavioral student outcomes

HPREC is on the pulse of technology implementation and with our technology initiatives within the state and region. The technology vision at HPREC encompasses the use of technology in the teaching process, as well as providing the following technology support and services to regional schools:

- E-Rate support
- Engineering support
- Distance education
- Professional development
- Technology assessments
- Technology planning
- Wide area network implementation

MISSION STATEMENT

High Plains Regional Education Cooperative’s Mission Statement

The mission of High Plains Regional Educational Cooperative (HPREC) is to research and implement sound educational practices in order to be responsive to client needs. We do this by engaging in research-based practices, developing relationships, and implementing systems to transform education. We do this so that all our clients are successful and effective.

High Plains Regional Education Cooperative’s Technology Mission Statement

Our technology mission is to provide the vision, leadership, training and support, and resources necessary to advance the effective use of technology for instructional and administrative purposes across northeastern New Mexico.

GOALS – ALIGNMENT WITH STATE OF NEW MEXICO TECHNOLOGY PLAN

Goals as developed by the New Mexico Council on Technology:

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1. Learning is significantly improved, using appropriate technologies, leading to high achievement in New Mexico adopted content standards.
2. Educators have the capacity to establish student-centered, technology-enhanced learning environments that result in increased student performance and economic viability.
3. K-12 students and educators in New Mexico public schools have affordable, universal access to high-speed, robust telecommunications, and schools modernized for technology.
4. Funding available to support planning, implementing, and assessing initiatives for integrating technology into New Mexico classrooms and schools.

It is High Plains Regional Education Cooperative's (HPREC) overriding goal to demonstrate and document how the use of technology, combined with robust professional development and technical assistance impact teacher learning and effectiveness, as well as student academic and behavioral outcomes.

We believe that High Plains Regional Education Cooperative's technology goals are lock step with the New Mexico Public Education Department's Technology Plan Goals.

HPREC's overall technology goal is:

By the year 2015, all students and staff will be actively engaged in meaningful activities in a technology-rich environment, which will enhance teaching, learning, communications, and productivity, as well as prepare our region's students to compete in a technologically advanced work force.

Specific technology goals are as follows:

- **Goal 1:** Student learning is significantly improved through high-quality, web-based professional development.
- **Goal 2:** Student learning for at-risk students is significantly improved through high-quality, web-based professional development.
- **Goal 3:** Educator efficiency and accountability is supported with a comprehensive, web-based software program.
- **Goal 4:** Student outcomes for at-risk students are significantly improved through student-centered, technology-enhanced ancillary services.
- **Goal 5:** Region 3 will support member school districts with appropriate infrastructure, hardware, and software to meet their identified needs.

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The portion of the No Child Left Behind (NCLB) Act known as 'Enhancing Education Through Technology Act of 2001' (E2T2) has a goal: ***To assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability.***

Our district is meeting the NCLB E2T2 Act "every student is technologically literate by the time the student finishes 8th grade"

Our district will be NCLB E2T2 compliant by <insert date>

Technology Literacy Standards <http://www.iste.org/AM/Template.cfm?Section=NETS>

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Focus: Professional Development

Goal 1: Student learning is significantly improved through high-quality, web-based professional development focused on continuous improvement.

Linkage to State Technology Goals

1. Learning is significantly improved, using appropriate technologies, leading to high achievement in State Board of Education adopted content standards.
2. Educators have the capacity to establish student-centered, technology-enhanced learning environments that result in increased student performance and economic viability.

Strategy: 1.1 Expand high-quality, web-based professional development, technical assistance and support provided to administrators, teachers, paraprofessionals, and related service providers to increase student achievement aligned to state content standards.

Evaluation Procedure: Analysis of training evaluation documents, agendas, sign in sheets, system generated data (e.g., number of participants, walkthroughs, pdps, etc.); compilation of participation in web-based technical assistance and support (e.g., via GoTo Mtg, Vidy, etc.); review of region wide needs assessment results aligned to professional development offerings.

Activity/Task	Professional Development	Evaluation (Measurable Change)	People Involved	Starting and Ending Dates	Supporting Resources: Description Type	Cost / Funding Source
<p>1.1.1 Provide comprehensive professional development and technical assistance in the teacher evaluation process.</p>	<p>Ongoing support focusing on <i>Marzano's Teacher Causal Evaluation Framework</i> provided by <i>iObservation</i> trainers and HPREC staff</p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic <p>Technical assistance to support the use of iPads in the teacher evaluation process and for communication between principal, teachers and focus groups</p>	<p>The New Mexico Evaluation Process will be built upon and updated with current research, guidance and best practices.</p>	<p>Superintendents Principals Teacher Leaders Classroom Instructors</p>	<p>Phase II July 1, 2012- June 30, 2013 2013-2015 TBD</p>	<p>Licensing for web-based product, <i>iObservation</i>, an instructional and leadership improvement system</p> <p>Marzano publications, online resources, accompanying materials, <i>iObservation</i> trainers, HPREC Staff, iPads</p>	<p>Phase II 2013-2015 TBD General Operational Funding</p>

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<p>1.1.2 Provide access to comprehensive professional learning materials and technical assistance to develop and maintain effective <i>Professional Learning Communities</i>.</p>	<p>Ongoing support using <i>Solution Tree's Professional Learning Communities Framework</i> provided by HPREC Staff</p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>The Professional Learning Communities Model will support district efforts for continuous improvement.</p>	<p>Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals Related Service Providers</p>	<p>Annually, as per needs assessment results</p>	<p>Licensing for web-based Solution Tree materials</p> <p>Publications, online resources, and accompanying materials</p>	<p>\$1000</p>
<p>1.1.3 Provide ongoing technical assistance and support for school improvement initiatives.</p> <p><i>Common Core State Standards</i></p>	<p>Ongoing support focusing on the transition to the Common Core State Standards</p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>The transition to the Common Core State Standards will be supported with technology based opportunities.</p>	<p>Superintendents Principals Teacher Leaders Classroom Instructors</p>	<p>Phase I, April 2012 to June 30, 2013</p> <p>2013-2015, TBD</p>	<p>Licensing for GoTo Mtg, Vidyo, and/or other identified web-based solutions</p> <p>Publications, online resources, and accompanying materials</p>	<p>\$20,000</p>
<p>1.1.4 Provide ongoing technical assistance and support for school improvement initiatives.</p> <p><i>Educational Plan for Student Success</i></p>	<p>Ongoing support focusing on district and site level <i>Educational Plan for Student Success</i></p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>District and school EPSS documents will be updated reflecting continuous improvement and submitted in a timely manner, as per the NMPED's guidelines.</p>	<p>Superintendents Principals Teacher Leaders Classroom Instructors</p>	<p>Annually, as per needs assessment results</p>	<p>Licensing for GoTo Mtg, Vidyo, and/or other identified web-based solutions</p> <p>Publications, online resources, and accompanying materials</p>	<p>\$1000</p>

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<p>1.1.5 Provide ongoing technical assistance and support for school improvement initiatives.</p> <p><i>Literacy</i></p>	<p>Ongoing support focusing on Literacy</p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>District and school efforts to improve student literacy skills, K-12, will be supported with technology based resources.</p>	<p>Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals Related Service Providers</p>	<p>Annually, as per needs assessment results</p>	<p>Licensing for GoTo Mtg, Vidy, and/or other identified web-based solutions</p> <p>Publications, online resources, and accompanying materials</p>	<p>\$3000</p>
<p>1.1.6 Provide ongoing professional development, technical assistance and support for school improvement initiatives.</p> <p><i>Data Based Decision Making</i></p>	<p>Ongoing professional development and support focusing on <i>Data Based Decision Making</i></p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>Technology based resources will support district efforts to represent, manipulate, and communicate data, information and ideas.</p>	<p>Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals Related Service Providers</p>	<p>Annually, as per needs assessment results</p>	<p>Licensing for GoTo Mtg, Vidy, and/or other identified web-based Solutions</p> <p>Licensing for TIENET</p> <p>Publications, online resources, and accompanying materials</p>	<p>\$5000</p>

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Focus: Support for At-Risk Populations

Goal 2: Student learning for at-risk students is significantly improved through high-quality, web-based professional development.

Linkage to State Technology Goals

1. Learning is significantly improved, using appropriate technologies, leading to high achievement in State Board of Education adopted content standards.
2. Educators have the capacity to establish student-centered, technology-enhanced learning environments that result in increased student performance and economic viability.

Strategy: 2.1 Expand high-quality, web-based professional development, technical assistance and support provided to administrators, teachers, paraprofessionals, and related service providers to ensure compliance with state and federal regulations (IDEA 2004), as well as increase student achievement aligned to state content standards for students with IEPs.

Evaluation Procedure: Analysis of training evaluation documents, agendas, sign in sheets, TIENET generated reports; compilation of participation in web-based technical assistance and support (e.g., via GoTo Mtg, Vidyo, etc.) and technical Q&As; Direct Step reports (number of participants, targeted modules, and completion data).

Activity/Task	Professional Development	Evaluation (Measurable Change)	People Involved	Starting and Ending Dates	Supporting Resources: Description Type	Cost / Funding Source
<p>2.1.1 Provide comprehensive and ongoing professional development, support, and technical assistance in Special Education compliance and program.</p>	<p>Ongoing professional development, technical assistance and support</p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>Provisions of special education and related services, as described in student IEPs, will be supported with current technology.</p>	<p>Special Education Directors and Teachers Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals Related Service Providers</p>	<p>Annually, as per needs assessment results and regulatory changes</p>	<p>HPREC Staff Licensing for GoTo Mtg, Vidyo, and/or other identified web-based solutions Licensing for TIENET Publications, online resources, and accompanying materials Special Education procedures, NM PED guidance documents</p>	<p>\$5000</p>

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<p>2.1.2 Provide comprehensive and ongoing professional development and technical assistance in Special Education compliance and program.</p> <p><i>Legal Services</i></p>	<p>Ongoing technical assistance and consultation through a legal service retainer agreement with Walsh, Anderson, Gallegos, Green, and Trevino Law Firm</p>	<p>Provisions of special education and related services, as described in student IEPs, will be supported with current technology.</p>	<p>Special Education Directors and Teachers</p> <p>Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals</p> <p>Related Service Providers</p>	<p>Monthly and as legal issues and questions arise</p>	<p>Walsh Law Firm (retainer agreement, publications, email updates)</p> <p>HPREC Staff</p> <p>Licensing for GoTo Mtg, Vidyo, and/or other identified web-based solutions</p>	<p>\$1000 per year</p>
<p>2.1.3 Provide access to web-based learning modules that focus on Special Education topics.</p>	<p>On demand web-based professional development as per contract with Direct Step</p>	<p>Provisions of special education and related services, as described in student IEPs, will be supported with current technology.</p>	<p>Special Education Directors and Teachers</p> <p>Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals</p> <p>Related Service Providers</p>	<p>Ongoing, as needed</p>	<p>Direct Step License</p> <p>HPREC Staff</p>	<p>\$65 per course</p>

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Focus: Support for At-Risk Populations

Goal 3: Educator efficiency and accountability is supported with a comprehensive, web-based software program.

Linkage to State Technology Goals

1. Learning is significantly improved, using appropriate technologies, leading to high achievement in New Mexico adopted content standards.
2. Educators have the capacity to establish student-centered, technology-enhanced learning environments that result in increased student performance and economic viability.

Strategy: 3.1 Ongoing development of TIENET, a secure and web based platform for documenting events and processes for students, as well as assistance in complying with state and federal regulations.

Evaluation Procedure: Completion of change requests (TIENET); TIENET training documents, agendas, sign in sheets; compilation of participation in web-based technical assistance and support (e.g., via GoTo Mtg, Vidy, etc.); TIENET generated reports.

Activity/Task	Professional Development	Evaluation (Measurable Change)	People Involved	Starting and Ending Dates	Supporting Resources: Description Type	Cost / Funding Source
<p>3.1.1 Provide access to and continued development and maintenance of TIENET.</p>	<p>Facilitation of user group trainings (ongoing, as needed) Ongoing technical assistance</p>	<p>Provisions of special education and related services, as described in student IEPs, will be supported with current technology.</p>	<p>Special Education Directors and Teachers Principals Teacher Leaders Classroom Instructors Counselors Related Service Providers</p>	<p>Ongoing</p>	<p>Licensing for TIENET HPREC Staff Online resources and online technical assistance Special Education procedures, NM PED guidance documents Licensing For Meduclaim (Medicaid School Based Services billing software)</p>	<p>\$30000</p>

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<p>3.1.2 Provide ongoing professional development and technical assistance in the use of all aspects of TIENET.</p>	<p>Ongoing professional development, technical assistance and support</p> <ul style="list-style-type: none"> • On Site • Web Based • Electronic 	<p>Provisions of special education and related services as described in student IEPs will be supported with current technology.</p>	<p>Special Education Directors and Teachers</p> <p>Superintendents Principals Teacher Leaders Classroom Instructors Paraprofessionals</p> <p>Related Service Providers</p>	<p>Ongoing</p>	<p>Licensing for TIENET</p> <p>HPREC Staff</p> <p>Online resources and online technical assistance</p> <p>Special Education procedures, NM PED guidance documents</p> <p>Licensing For Meduclaim (Medicaid School Based Services billing software)</p>	<p>Included in 3.1.1</p>
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Focus: Support for At-Risk Populations

Goal 4: Student outcomes for the at-risk student population are significantly improved with the use of student-centered, technology-enhanced related services.

Linkage to State Technology Goals

1. *Learning is significantly improved, using appropriate technologies, leading to high achievement in New Mexico adopted content standards.*
2. *Educators have the capacity to establish student-centered, technology-enhanced learning environments that result in increased student performance and economic viability.*

Strategy: 4.1 Related services provided to children with special needs will include dynamic tools of technology that engage them, increase therapy effectiveness and productivity and result in meaningful academic and behavioral outcomes.

Evaluation Procedure: Compilation/survey of Related Service Provider technology usage; iPad Commitment Letters; TIENET generated data (reflecting related services).

Activity/Task	Professional Development	Evaluation (Measurable Change)	People Involved	Starting and Ending Dates	Supporting Resources: Description Type	Cost / Funding Source
4.1.1 Related Service Providers deliver therapies utilizing tablets, appropriate applications, and other technology.	Professional development and support in the use of iPads and other technologies	Provisions of special education and related services, as described in student IEPs, will be supported with current technology.	Related Service Providers	Phase II, July 1, 2012 to June 30, 2013 2013-2015, TBD	HPREC Staff iPad IIs iPad applications Survey Monkey licensing	\$6000

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Focus: Infrastructure, Hardware and Software

Goal 5: HPREC will support member school districts with appropriate infrastructure, hardware, and software to meet identified needs.

Linkage to State Technology Goals

3. *K-12 students and educators in New Mexico public schools have affordable, universal access to high-speed, robust telecommunications, and schools modernized for technology.*
4. *Funding is available to support planning, implementing, and assessing initiatives for integrating technology into NM classrooms and schools.*

Strategy: 5.1 HPREC's infrastructure will be updated and support the most current agency and district needs.

Evaluation Procedure: Needs assessments

Activity/Task	Professional Development	Evaluation (Measurable Change)	People Involved	Starting and Ending Dates	Supporting Resources: Description Type	Cost / Funding Source
5.1.1 Provide adequate bandwidth between HPREC and districts for online learning, communications, and data connectivity	Technical assistance will be delivered to district network administrators, as per needs assessments.	Schools will have appropriate infrastructures to ensure that the physical and organization structures, as well as virtual connections, are in place to support learning and assessment of learning.	Executive Director IT Personnel (HPREC and District Level)	Ongoing	Erate HPREC Staff	\$5000

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Strategy: 5.2 HPREC's hardware and software will be updated and support the most current agency and district needs.						
Evaluation Procedure: TIENET reports; JMAC logs						
5.2.1 Linkage from district student information systems to TIENET utilizing a data connectivity tool will ensure that student information is consistent and up to date.	Technical assistance to district network administrators and special education directors	A seamless import of student information will be transferred from JMAC to TIENET.	HPREC Staff District IT Staff Special Education Directors District STAR Coordinators	Ongoing	Licensing for TIENET STARS manual Data Connectivity Tool manual HPREC Staff HPREC Data Server	Included in 3.1.1
5.2.2 Provide state-wide online school bus driver training that is New Mexico Department of Transportation approved.	HPREC provides linkage between district bus driver personnel and an online solution; technical assistance is fielded.	School districts, statewide, will have access to quality and relevant school bus driver training to ensure compliance and continuous improvement.	HPREC Staff District School Bus Drivers District Business Office Personnel	Ongoing	SafePupil Licensing Vertical School Partners HPREC Staff	\$1000
Strategy: 5.3 Telecommunication methods will be updated and support the most current agency and district needs.						
Evaluation Procedure: Needs assessments; surveys						
5.3.1 Re-develop and maintain HPREC's website.	Technical assistance to region wide staff in website features Technical assistance to HPREC staff in web development and maintenance	Web host planning documents Compilation of participation in web-based technical assistance and support (e.g., via GoTo Mtg, Vidyo, etc.)	HPREC Staff SchoolWebMasters	Phase I, July 1, 2012 to June 30, 2013 2013-2015 TBD	Licensing for SchoolWebMasters HPREC Staff	\$5000

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5.3.2 Continue to maintain a web based accountability and professional development system (escworks).	Technical assistance to professional development participants (offerings, registration, linkage to school initiatives, and transcripts)	System generated reports (escworks)	HPREC Staff Professional development participants (regional, state, and national)	Ongoing	Licensing for escworks HPREC Staff	\$12000
5.3.3 Access to GoToMeeting.com, Vidyo, and/or other web based solutions to augment communication.	Technical assistance and support of web based products	System generated reports.	HPREC Staff Professional development participants (regional, state, and national)	Ongoing	Licensing for GoToMeeting.com, Vidyo, and/or other web based solutions	\$3000
5.3.4 Access to web based email for HPREC staff.	Technical assistance and support for Outlook (laptops, iPads, desktops, etc.)	Compilation of technical support tickets.	HPREC Staff	Ongoing	Email server HPREC Staff Outlook Technical assistance manuals	\$1000

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STRATEGIES FOR IMPROVING ACADEMIC ACHIEVEMENT AND TEACHER EFFECTIVENESS

Action Strategy: Continued innovative use of technology in professional development and in the support for at-risk students, while ensuring that the necessary infrastructure, hardware and software are available.

Professional Development

HPREC will provide ongoing, technology-based professional development to classroom teachers and administrators to increase student engagement and achievement.

To improve the academic achievement of students (as measured by State Content Standards, Benchmarks and Performance Standard) and teacher effectiveness with technology based professional development.

Steps	Time Frame	Person Responsible
a) Develop and disseminate a region-wide professional development needs assessment.	Annually (April)	HPREC Director of Programs
b) Plan and deliver professional develop in response to region wide and/or district specific identified needs.	Ongoing	HPREC Education/Program Specialist
c) Collect and analyze region wide student performance data to determine professional development effectiveness and efficiency.	Annually (June)	HPREC Director of Programs HPREC Education/Program Specialist

At-Risk Student Population

HPREC will provide ongoing, technology-based professional development and technical assistance to special education and general education administrators and teachers to increase academic and behavioral performance by at-risk students, as well to ensure compliance with federal and state regulations.

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To improve the academic achievement of at-risk students, as measured by State Content Standards, Benchmarks, and Performance Standards.

Steps	Timeline	Person Responsible
a) Develop and disseminate a region-wide professional development needs assessment (to support at-risk students).	Annually (April)	HPREC Director of Programs
b) Plan and deliver professional development to support at-risk students in response to region wide and/or district specific identified needs.	Ongoing	HPREC Director of Programs HPREC Education/Program Specialist
c) Collect and analyze region wide at-risk student performance data to determine professional development effectiveness and efficiency.	Annually (June)	HPREC Director of Programs HPREC Education/Program Specialist
d) Provide tools of technology to address compliance and accountability of efforts in support of at-risk student academic and behavioral outcomes.	Ongoing	HPREC Director of Programs HPREC Education/Program Specialist
e) Related Service Providers will utilize various technologies to ensure therapy effectiveness and to increase student engagement.	Ongoing	HPREC Director of Programs Related Service Providers

Infrastructure, Hardware, and Software

HPREC will respond to region wide technology based focus areas with the necessary infrastructure, hardware, software, and technical assistance to support student learning outcomes.

To improve the academic achievement students, as measured by State Content Standards, Benchmarks, and Performance Standards and teacher effectiveness, by responding to regional technology focus areas.

Steps	Timeline	Person Responsible
a) Appropriate bandwidth and necessary infrastructure will be available for region wide and district specific initiatives.	Ongoing	HPREC Executive Director Contracted IT Specialists
b) Appropriate hardware will be available for region wide and district specific initiatives	Ongoing	HPREC Executive Director Contracted IT Specialists
c) Appropriate software and licensing will be available for region wide and district specific initiatives	Ongoing	HPREC Executive Director HPREC Director of Programs
d) Develop and implement an evaluation tool to measure the effectiveness of technology support provided to the region.	TBD	HPREC Director of Programs HPREC Education/Program Specialist

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In summary, High Plains Regional Education Cooperative maintains that effective use of technology will significantly improve HPREC's schools, classrooms, and libraries/media centers; thereby improving student outcomes, which will give the participating consortium members a competitive advantage both economically and academically.

HPREC maintains that to meet increasing demands regarding financial resources, HPREC must make effective use of technology to support districts. The use of technology and technical assistance provided by HPREC: (a) reduces administrative burden, (b) maximizes building, consortium, district and community resources, (c) reduces duplication of effort, (d) facilitate cooperation among districts and other educational entities, and (e) provides timely, consistent, accurate information for decision-making, while coordinating efforts throughout the region.

STEPS TO INCREASED ACCESSIBILITY

High Plains Regional Education Cooperative is committed to assisting schools within the region to ensure that all teachers and students have increased access to technology, as well as web-based tools that will assist educators in being more effective and efficient.

Web-Based Services

High Plains Regional Education Cooperative's goal is to maximize the effective use of technology for productivity and learning. HPREC staff ensures that access to robust web-based professional development is available, user friendly, and accompanied with multiple pathways of technical assistance. In addition, the HPREC website is in a re-development phase with goals designed to ensure that educators are provided with current information, links and portals, and high interest resources.

Accountability

High Plains Regional Education Cooperative (HPREC) is committed to making information sharing more effective and efficient for teachers, support staff, and administrators. With an emphasis on assessment and accountability, High Plains Regional Education Cooperative addresses this challenge with expertise and energy.

HPREC continues to seek the most efficient methods to collect, use, and report data. One example is *EscWorks*, a web-based accountability and professional development system, purchased from Region IV Education Service Center in Houston, Texas. The customized model is dynamic in nature, provides individual professional development accounts for educators, and has many advantages. Those include:

- Quick, easy registration for all HPREC professional development trainings,
- Easy access to training records and transcripts,
- Ongoing updates to individual web-based professional development portfolio,
- Inclusion of outside trainings in individual web-based professional development portfolio,
- Detailed reports for teachers and administrators on professional development activities within their school and district.

Another example is HPREC's work with TIENET, a secure and web-based platform for documenting events and processes for students. The updated version of TIENET includes a student assessment and accountability component that will allow educators to gather information for data-based decision making. HPREC envisions this feature as an efficient tool for Student Assistance Teams and Individualized Education Plan Teams.

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Educational Development Activities

High Plains Regional Education Cooperative (HPREC) is committed to providing and supporting online learning opportunities for member districts, including Innovative Digital Education and Learning in New Mexico (IDEAL-NM). These opportunities supplement the curricular offerings of New Mexico schools and are taught by highly qualified teachers.

HPREC's goal is to increase accessibility of distance learning courses to area students by providing regional educators with technical assistance and support in accessing distance learning courses. By making online learning accessible to students in rural northeastern New Mexico, geographic and capacity barriers to educational opportunities are reduced, while the digital literacy skills students need to participate in a global economy are increased. In addition, expanding educational opportunities to students helps close achievement gaps, supports college and career goals, and prepares students to be more competitive in the workforce.

As New Mexico transitions to standardized online assessment, HPREC will support and provide the necessary technical assistance to member districts to ensure adequate, high speed connection.

PROMOTION OF CURRICULA AND STRATEGIES THAT PROMOTE TECHNOLOGY INTEGRATION

Integrating Technology

Research is clear that the use of interactive technology increases student outcomes. Technology implementation applied effectively not only increases student learning, understanding, and achievement but also increases motivation to learn, encourages collaborative learning, and supports the development of critical thinking and problem solving (Schacter & Fagnano, 1999).

Pilot studies conducted by HPREC indicate that students, in particular those with IEPs, demonstrated increased engagement and improved academic and behavioral outcomes with the use of technology. The HPREC Related Services iPad project provides therapists with equipment, training, and support to integrate technology into their therapy sessions, as appropriate.

Active Promotion

High Plains Regional Education Cooperative will actively promote the use of many forms of interactive technology and HPREC's professional development, technical assistance, support, and services described in this technology plan through:

- Emails
- Brochures/flyers
- Website
- Quarterly newsletter (electronic)
- Discussion Boards and BLOGS
- Meetings/trainings
- Vidyo, GoToMeeting.com and/or other web-based solutions

ACCOUNTABILITY MEASURES (NM) AND EVALUATION PROCESSES (Erate)

Introduction and Overview

The major benefit of planning is that it serves as a catalyst for learning. As plans, such as the Strategic Technology Plan,

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are put into place, HPREC will monitor, evaluate, and revise its plans for maximal effectiveness. Strategies for engaging in this reflective process consist of ongoing data collection regarding selected performance measures, timely communication of data and analyses to key decision makers, and periodic reports that address both implementation and impact assessment.

A formal system for monitoring and evaluation of the comprehensive information technology plan is a foundational piece of this technology plan. The purpose of the assessment system is to provide ongoing information on implementation and impact.

The assessment design process included these process steps:

- Set priorities among implementation strategies,
- Transform priority strategies into results-oriented objectives,
- Select performance measures for each objective (using research to identify measures),
- Assign responsibility for each objective,
- Establish a database for tracking performance measures,
- Develop analysis and reporting procedures and formats, and
- Identify key decision makers requiring specific indicator data.

Performance Measures and Tracking Strategies

Two general categories of performance measures are embedded within the HPREC technology plan: (a) monitoring the implementation of the plan, and (b) evaluating the technology initiatives implemented against selected outcome measures.

Exhibit 1: Indicators for Monitoring the Implementation of HPREC's Technology Plan

Indicators
<ul style="list-style-type: none">• % of tasks completed as designed.• % of tasks completed within timelines (If not, why?)• Barriers encountered during implementation? How were they addressed?• Changes made to the implementation plan? Why? To what effect?• Implications of these mid-course corrections for redesign?

All evaluation data will be maintained in a database. The database will document, capture, and make information widely accessible to stakeholders.

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Exhibit 2:
Evaluation Methods and Measures by Outcome Measures

Goal Area	Measure	Method
Professional Development	<ul style="list-style-type: none"> • Number of participants accessing online professional development modules. • Number of participants taking face-to-face technology on technology topics. • Number of educators using the web-based system for registering for HPREC professional development. 	<ul style="list-style-type: none"> • Training evaluations. • Training sign-in sheets. • Professional development disaggregated reports (escWorks).
Educational Development	<ul style="list-style-type: none"> • Number of hours HPREC provided technology support, training, and/or technical assistance. 	<ul style="list-style-type: none"> • Technical Assistance Logs (escWorks) disaggregated by district.

Learning Support

Perhaps the best synthesis of research linking the knowledge base on learning to that on high technology performance is that done by Beau Fly Jones (Plugging In: Choosing and Using Technology, (Jones, Valdez, Nowakowski, & Rasmussen, 1995). Jones et.al examined research on engaged learning and high technology performance. They identified key indicators for engaged learning and for high technology performance and proposed a process for using those indicators to assess the effectiveness of individual technologies and technology-enhanced programs in support of the engaged learner.

Jones and her partners identify six categories of indicators for identifying high technology performance in support of engaged learning:

- **Access** to diverse technologies that a school provides students.
- **Operability** of the technology.
- **Organization** of the technology in terms of location and distribution.
- **Engagability** or the capacity to engage students in challenging learning.
- **Ease of use**
- **Functionality** or the technology's capacity to prepare students to use a variety of tools.

PROFESSIONAL DEVELOPMENT

High Plains Regional Education Cooperative (HPREC) will apply funding received from various sources towards establishing the technology and infrastructure necessary to provide a solid foundation to improve professional development and educational opportunities. These services will help improve educator effectiveness, which in turn enhances student potential to attain established content standards and benchmarks.

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Although the use of technology is relatively new, studies done by the Milliken Foundation and the Web Based Education Commission to the President of the United States and Congress indicated that while computers themselves are of value, it is the professional development that impacts their use in education. These studies show that any professional development is valuable and that systemic, embedded professional development for technology deeply impacts teaching and learning in ways that nothing else can.

Technology is a tool that can offer solutions to longstanding issues of teaching and learning. Technology professional development must do more than show how to automate past practices; its charge must be to develop the understanding that comes with confidence to “think with technology” and approach old problems in new ways.

One of the goals in implementing this type of professional development plan will be to ensure permanent system-level change within the school district’s and within each of our individual school sites to build capacity and sustainability.

The districts employ two very different types of end users:

- Those who use technology for administrative purposes, and
- Those who use it for instructional purposes and to increase student outcomes.

While there is some overlapping of the two, there is a significant difference in need. New Mexico has developed Performance-Based Standards for New Mexico teachers, which include knowledge of technology. These require a teacher to be “skilled and knowledgeable about using technology to support instruction and enhance student learning.”

High Plains Regional Education Cooperative is committed to the following foundational principles:

- Cooperative users of technology must have the necessary tools, infrastructure, hardware and software to do their jobs.
- Professional development in technology must determine a standard level of competency and confidence for users.
- Instructional use of technology can and should be different in many ways from administrative use.
- Professional development and technical assistance using technology to increase teacher and therapist effectiveness, must be long term, engaging, deeply embedded, and visionary.
- Professional development and technical assistance using technology to increase teacher and therapist effectiveness must be a priority, with appropriate resources of time and budget allocated.

Exhibit 3: Timeline for Collecting, Summarizing, and Reporting Professional Development Needs and Impact

Activities	Summer	Fall	Winter	Spring
Survey educators’ perceived professional development needs.				

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Survey educators' knowledge base on technology.				
Summarize educators' perceived professional development needs.				
Summarize educators' knowledge base on using technology and interactive technology.				
Develop and disseminate a technology professional development framework.				
Implement technology professional development framework with the goal to build sustainability and capacity.				
Evaluate professional development activities.				
Develop and disseminate professional development annual report.				

TECHNOLOGY TYPE AND COSTS

High Plains Regional Education Cooperative Technology Design Assumptions

Following is a list of assumptions and resources for the technology plan. These assumptions and resources have been developed in regards to how decisions are, and have been made, in previous planning and guide all fiscal decisions.

Assumptions of High Plains Regional Education Cooperative:

- Technology will support – not drive – curriculum.
- Instruction will determine technology integration points in all discipline areas.
- Appropriate use of technology will greatly enhance student achievement.
- Continuous, adequate district funding will be provided.
- Grants and other one-time funding sources will be actively sought but used only in a supplemental funding role.
- Technology standards and policies will be established and administered.
- Networks will be an essential method for the delivery of instruction, administration, and communications.
- All staff and students will have adequate access to technology.
- Professional development using technology to increase teacher effectiveness and student outcomes will be a top priority.
- Teachers will enhance technology and strive to incorporate it into their instructional modalities.

Resources for High Plains Regional Education Cooperative:

- A single wide area network and relational database will be developed to serve as the infrastructure for instructional and administrative information.
- Computing resources will be capable of supporting and running state of the art software and network resources.

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- The participating consortium member districts will have a functioning internal video network ultimately capable of providing two-way interactive video.
- Adequate technology education and professional growth opportunities will be provided for all district staff.

High Plains Regional Education Cooperative funds the installment, maintenance, ongoing management of technology and telecommunication, professional development, equipment, and software licensing from a variety of sources. This varies from year to year. Projections can be made based on prior years. A projected budget is depicted below:

Exhibit 4:
Technology Types and Costs

Technology Type	2012-2013	2013-2014	2014-2015
Personnel (Contracted)	\$10,000	\$10,000	\$10,000
Communications and Internet E-Rate reimbursement at 85%			
Hardware <ul style="list-style-type: none"> • Infrastructure • Laptops • Tablets • Printers 	\$75000	\$75000	\$75000
Software <ul style="list-style-type: none"> • Web based subscriptions (e.g., professional development, communication tools) • iPad applications 	\$60,000	\$60,000	\$60,000
Supplies and Materials <ul style="list-style-type: none"> • Printing • Power supplies 	\$8000	\$8000	\$8000
Maintenance Agreements <ul style="list-style-type: none"> • Software • Hardware • Copiers 	\$14000	\$14000	\$14000
Training and Travel (Staff Development)	\$5000	\$5000	\$5000

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E-Rate Matching Funds <ul style="list-style-type: none"> • Basic Maintenance • Network Infrastructure 			
	\$162,000.00	\$162,000.00	\$162,000.00

COORDINATION WITH OTHER RESOURCES

Funding Sources
Operational
E-Rate
Entrepreneurial Opportunities (e.g., Law Conference, DIBELS Summit)
Member Contributions

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HPREC works closely with regional superintendents and technology directors to ensure seamless and effective technology across the region. Exhibit 5 summarizes HPREC’s work with regional schools to improve overall student education.

**Exhibit 5:
High Plains Regional Education Cooperative Logic Model**

Conditions	Inputs	Outputs	Outcomes
<p><u>Barriers:</u></p> <ul style="list-style-type: none"> • Decreasing enrollment • Limited budgets • Higher demands for results • Rural nature of schools <p><u>Needs:</u></p> <ul style="list-style-type: none"> • Ongoing web-based professional development • Increase teacher and related service provider effectiveness to improve student outcomes • Ongoing opportunities for students to take distance learning courses • Support for transition to online standardized assessments, as per NMPED <p><u>Opportunities:</u></p> <ul style="list-style-type: none"> • Potential for technology overcomes rural barrier • Increase quality and efficiency of professional development opportunities • Increase student outcomes <p><u>Assets:</u></p> <ul style="list-style-type: none"> • HPREC structure 	<p><u>Professional Development</u></p> <p><u>Methods:</u></p> <ul style="list-style-type: none"> • Web-based professional development <p><u>Topics:</u></p> <ul style="list-style-type: none"> • Teacher evaluation • Learning communities • Common Core State Standards • EPSS • Literacy • Data based decision making • Special Education • Ancillary services <p><u>Audience:</u></p> <ul style="list-style-type: none"> • Superintendents • Principals • Teacher Leaders • Teachers • Paraprofessionals • Related Service Providers • Special Education Directors 	<ul style="list-style-type: none"> • Increase the opportunities for educators to access quality online professional development and technical assistance 	<ul style="list-style-type: none"> • Professional Development • Student Outcomes

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	<p><u>Support for At-Risk Populations</u> <u>Methods:</u></p> <ul style="list-style-type: none"> • Web-based professional development <p><u>Topics:</u></p> <ul style="list-style-type: none"> • Special Education • Special Education compliance • Data based decision making • Ancillary services <p><u>Audience:</u></p> <ul style="list-style-type: none"> • Superintendents • Principals • Teacher Leaders • Teachers • Special Education Directors • Related Service Providers 	<ul style="list-style-type: none"> • Increase the opportunities for educators to access quality online professional development and technical assistance 	<ul style="list-style-type: none"> • Professional Development • Student Outcomes
	<p><u>Region Wide Technology Focus Areas</u> <u>Purpose:</u></p> <ul style="list-style-type: none"> • Infrastructure, hardware, software <p><u>Audience:</u></p> <ul style="list-style-type: none"> • HPREC Staff • Superintendents • District IT Staff 	<ul style="list-style-type: none"> • Development of a robust, reliable infrastructure for supporting regional needs 	<ul style="list-style-type: none"> • Infrastructure, hardware, software supporting identified region wide and district specific needs

INNOVATIVE DELIVERY STRATEGIES

Setting high standards of excellence is one of the qualities that High Plains Regional Education Cooperative is most respected for throughout the region and across the state of New Mexico. As part of the HPREC technology plan and services, a strong foundational piece is to provide technical assistance and training to regional schools to ensure the use of innovative strategies for the delivery of professional development, increased distance learning opportunities, as well as allow our rural schools to have access to learning opportunities that otherwise would be time and/or cost prohibitive.

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In an effort to develop High Plains Regional Education Cooperative's strategic plan, certainly the most recent technology effectiveness research and successes must be examined. However, even with evidence of success or effectiveness, one must be weighed against the important question in the minds of policy-makers, which is *"What is the added value of technology to the overall mission of the school district?"* In an effort to help determine that added value, the following list identifies recent successes realized in technology:

- E-Rate requests for years 2012-2015
- Fiber Optic Communications for all network voice and data communications in the school districts,
- Bandwidth Management – applications demanding greater bandwidth such as video can be adjusted locally,
- Switching Technology – modern high speed switching is now the standard,
- Full UPS back-up for critical systems,
- Study for the implementation Call Center (Help Desk),
- Full WEB Site,
- Work on the development of workflow functions in WEB applications including staff development and human resources,

As part of this process, High Plains Regional Education must explore and answer the following questions:

- What is the added value of technology to the overall mission of the school district and HPREC?
- What impact can technology make on overall student achievement?

In order to provide quality education for all students in the High Plains Regional Education Cooperative's diverse community, with a focus on increased student achievement, we must embrace all of the advantages that technology can offer to increase learning of teachers and students.

Even while engaging in the quest to determine the value added offered by technology, it is vitally important that the leadership realize that there are existing technology needs. Technology, like any highly developed field of endeavor, requires definite attention to proper usage. Without proper training resulting in suitable usage any tool is rendered completely ineffective. Expectations for the results of technology cannot be held too high unless adequate training is fully funded. All of the current research holds that at least 30% of all equipment costs need to be devoted to training. In the recent years, training for technology has been held to far less than that optimum level. The fact that a district's help desk can solve nearly 50% of incoming calls proves that too large a segment of district users are inadequately trained.

PARENTAL INVOLVEMENT

High Plains Regional Education Cooperative (HPREC) partners with the schools and communities that they serve to promote and increase parent involvement. In addition, to providing ongoing technical assistance to parents regarding special education regulations and practices, HPREC also hosts a regional-wide special education system, *TIENET*. This web-based product documents all special education activities including pre-referral, eligibility, IEP development, service documentation reporting to parents, and Medicaid billing. Each feature promotes accountability to achieve compliance with state and federal reporting requirements of IDEA 2004. *TIENET* assists parent in understanding the special education process and encourages them to be an integral part of the process.

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COLLABORATION WITH ADULT LITERACY SERVICE PROVIDERS

HPREC is developing partnerships with community organizations to support adult information literacy. Infrastructure, equipment, and software support opportunities for area community members to access training, coursework, and videoconferencing.

SUPPORTING RESOURCES

The High Plains Regional Education Cooperative employs a variety of resources to support the effective use of technology throughout the region and within the agency.

Relying on agency personnel (i.e., Executive Director, Director of Programs, Education and Program Specialist, Education Technology Specialist, and Help Desk Personnel) is essential to the day-to-day functions of HPREC.

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E-RATE REQUIREMENTS

**SCHOOL DISTRICT NAME -TECHNOLOGY AND LEARNING PLAN
DISTRICT-LEVEL NETWORK & TELECOMMUNICATIONS PLAN – PART 1**

Technology Assessment

CIPA Compliance: <http://www.fcc.gov/cgb/consumerfacts/cipa.html> <http://www.universalservice.org/si/applicants/step10/cipa.aspx>

is compliant with the provisions of the Children’s Internet Protection Act (CIPA).

will be CIPA compliant by <insert date>

Keep in mind that your district is not eligible for ERATE funding if they are not CIPA Compliant

District Technology Standards	Budget Summary
How does HPREC comply with CIPA requirements?	Annual renewal of Sonic Wall (\$5000)
Internet Filter	Sonic Wall (see above)
Acceptable Use Policy	Annually Reviewed with Staff
Internet Safety Training	Per District

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SCHOOL DISTRICT NAME TECHNOLOGY AND LEARNING PLAN	
TECHNOLOGY PLAN	
DISTRICT-LEVEL NETWORK & TELECOMMUNICATIONS PLAN	
E-Rate Priority One Requests	
Voice, Data, Video and Other Priority One Capabilities	Purchase / Budget / Potential Funding Source(s)
<p><i>Does your district plan on applying for priority one E-Rate funding?</i> http://www.universalservice.org/sl/applicants/step06/priority-1-components-timeline-installation.aspx Yes</p>	<p>Estimated Expenditures Voice Data Potential Funding Sources: E-Rate, Member Contributions and Operational Funds</p>
<p><i>What is the primary measure for determining E-Rate discounts? NSLP or Surveys</i> http://www.universalservice.org/sl/applicants/step05/alternative-discount-mechanisms.aspx NSLP</p>	<p>n/a</p>
<p><i>Districts evaluation process that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.</i> See Accountability and Evaluation Process (Page 25)</p>	<p>n/a</p>

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SCHOOL DISTRICT NAME - TECHNOLOGY AND LEARNING PLAN

TECHNOLOGY PLAN

DISTRICT-LEVEL NETWORK & TELECOMMUNICATIONS PLAN

E-Rate Priority Two Requests

Hardware/Software/Support	Purchase / Budget / Potential Funding Source(s)
<p><i>Does your district plan on applying for priority two E-Rate funding?</i> HPREC does not, although member districts may.</p>	
<p><i>How are ERATE components tracked for a yearly inventory of equipment? Salvaged equipment?</i></p> <p>Inventory and auditing of assets are performed annually by contracted individuals. Guidelines are followed as indicated by HPREC's Board and auditors.</p> <p>As of July 1, 2012, all E-Rate components are in use and/or repurposed.</p>	<p>\$3000 Fund: Operational</p>
<p>How will E-Rate equipment be maintained in your district?</p> <p>HPREC applies for E-Rate funding to cover Basic Maintenance of Internal Connections. In the event that funding is not received, equipment is maintained by contracted network support.</p>	

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SCHOOL DISTRICT NAME TECHNOLOGY AND LEARNING PLAN

TECHNOLOGY PLAN

DISTRICT-LEVEL NETWORK & TELECOMMUNICATIONS PLAN

Maintenance, Upgrade and Support Strategies

<i>Description of Maintenance/Upgrade/Support Strategies</i>	Purchase / Budget / Potential Funding Source(s)	Timeline
<p><i>How will you maintain all technology (hardware/software) components?</i></p> <p>HPREC contracts with support personnel to maintain all technology components. This is performed both onsite and remotely.</p>	\$10000	Ongoing
<p><i>How will you evaluate existing technology and future needs?</i></p> <p>HPREC evaluates current technology and future needs with input from member districts and agency staff. Outsourced expertise is relied upon for network/infrastructure assessment.</p>	n/a	Annually
<p><i>How will the technology plan be evaluated each year?</i></p> <p>The technology plan will be reviewed by committee members, ensuring that goals and objectives are in progress and making informal adjustments, as needed. This information will assist in the redesign of the tech plan during the next cycle.</p>		

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1. Goals and Realistic Strategy for Using Telecommunications and Information Technology

High Plains Regional Education Cooperative (HPREC) will leverage all funding sources available, both to HPREC and consortium members, including E-Rate to provide the necessary telecommunications and Internet connectivity infrastructure (with associated basic maintenance service) to allow its consortia members and stakeholders (i.e., students, teachers, administrative staff, and parents) to access, utilize, and benefit from these resources in the promotion of educational and organizational objectives.

Strategies to implement this main objective are:

- Build upon the currently established Network Operation Center (i.e., NOC) with industry standard circuits, systems, and configurations to include redundancy, high-availability, meeting and exceeding service-level agreement metrics, and utilization of proven technologies and methodologies to ensure the optimum performance in the distribution of data, video, and Internet access.
- Continually monitor systems for improvement of performance.
- Implement and monitor best practices in security configurations ensuring compliance with federal, state, and local government standards for protection of sensitive information.
- Partner with various private and public sector organizations to widen the services, access, reliability, data recovery, support and technical resources available to HPREC's consortium members and their stakeholders.
- Seek server and resource consolidation methods and strategies for cost reduction and leveraging of "green" technologies wherever possible without affecting performance and security.
- Implement scalable solutions and technologies that can be expanded with minimal effort and cost to widen the access, availability, and performance of systems, networks, and communications.
- Document all system designs, configurations, pertinent information for disaster recovery, and provide change management at all levels of affected technologies and systems.

Please refer Appendix A for a visualization of the existing HPREC network configurations and connectivity

2. Professional Development - see pages 27-29 of this document.

3. Assessment of Telecommunications Services, Hardware, Software, and Other Service.

High Plains Regional Education Cooperative (HPREC) has established the necessary core infrastructure to build upon and align with short and long term goals.

High Plains REC has included, within its infrastructure, ideal network configurations as recommended and promoted by their respective manufacturers in network design, redundancy, and performance optimization. HPREC is seeking to improve upon its already established network communications infrastructure with DS3 and ATM (Asynchronous Transfer Mode) and utilize emerging developments in telecommunication fiber optic solutions provided by well established telecommunication vendors. These emerging technologies will augment current bandwidth for consortium members.

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The HPREC Network Operations Center located in Raton, NM, connects to Century Link with fiber optic; its services and consortium connection points are distributed through various T-1 service providers. New developments in fiber optic availability at these remote sites will allow for higher bandwidth and faster connectivity speeds.

HPREC has standardized various manufacturer solutions to ensure interoperability and compatibility between systems such as:

- Cisco Systems, Inc. for Network Equipment
- Microsoft Corporation for Operation Systems (Windows Server & Desktop)
- American Power Conversion or APC for Backup Power Systems and Cabinets
- NetApps for Data Storage
- VMWare for Server Virtualization Solutions
- HP and IBM Rack Mount Servers
- Tandberg for Video Systems

HPREC follows Cisco's Hierarchical Model of Network Distribution, with a core and distribution connectivity points employing redundant connectivity links wherever possible and feasible.

The current configurations at HPREC's NOC are ideal for its business applications and service offerings to its participating consortia members. HPREC performs annual evaluations and assessments to ensure optimal performance, appropriate security configurations, and identification of next step enhancements.

Accomplished Technology Initiatives

- Implementation of 15mb Century Link Internet pipe for consortia use.
- Provisioning of core router to accommodate upgraded Internet bandwidth.
- Procurement of adequate external IP address space for current internal, public-facing services including:
 - Exchange e-mail
 - World Wide Web Services
 - Tandberg Video Services
- Configuration/Implementation/Testing of WAN environment to connect participating consortium schools to core router for Internet access, either production or failover.
- Utilization of fiber optic link between HPREC and local school sites to provide layer 2/3 production Internet access.
- Installation of enterprise-class Cisco wireless architecture with guest and private SSIDs.
- Implementation of upgraded UPS equipment to provide maximum uptime and clean power to core equipment.

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- Complete vendor and manufacturer support contracts for equipment, basic and advanced support requirements, and consulting of implementing education-based technologies and best practices.
- Enhanced implementation, continual monitoring and adherence to CIPA and other federal, state, and local requirements for Child Internet Protection initiatives, laws, and guidelines.
- Base-line implementation of virtualization architecture including robust server hardware and core networking equipment to provide reliable and stable service-based technology. This includes:
 - High-end virtual servers
 - Redundant core servers
 - Highly available redundant switching gear
 - A high-performance file server supporting multiple file systems for virtual server data
- Development of a reliable content delivery system for training materials, presentations, web data, etc. for deployment over WAN links and the Internet.
- Configuration of virtual environment to support HPREC's long-term technology vision including off-site backups, data replication, data warehousing, hosted services, and disaster recovery.

Current Initiatives – Estimated Completion Time 1 to 2 Years

- Implementation of education-based applications for WAN and Internet delivery.
- Expansion of WAN and Internet Services to other consortium member school sites.
- Increase of WAN and Internet circuit capacities to meet growing demands of bandwidth.
- Systems and Bandwidth monitoring, analysis, and real-time allocation of resources to participating sites.

Future Initiatives – Estimated Completion Time 2 to 3 Years

- Continual evolution of the data center core, including the virtual environment to provide services and reliability based on growth and changing requirements. This includes the following additions:
 - Additional bandwidth and/or circuit(s) for optimal reliability and to meet growth demands.
 - Additional enterprise-class chassis layer 3 switches to provide separate networks for hosted services.
 - Additional disk arrays within the file server to accommodate increasing storage demands.
 - Additional routers to accommodate increased WAN link requirements to provide Internet connectivity to rural schools.
 - Additional UPS equipment for maximum uptime.

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- An ever-evolving mission to provide the highest quality services to rural and local school districts with innovative focus on educational needs.
4. *Budget Resources – see pages 29-31 of this document.*
 5. *Ongoing Evaluation Process— see pages 25-27 of this document.*

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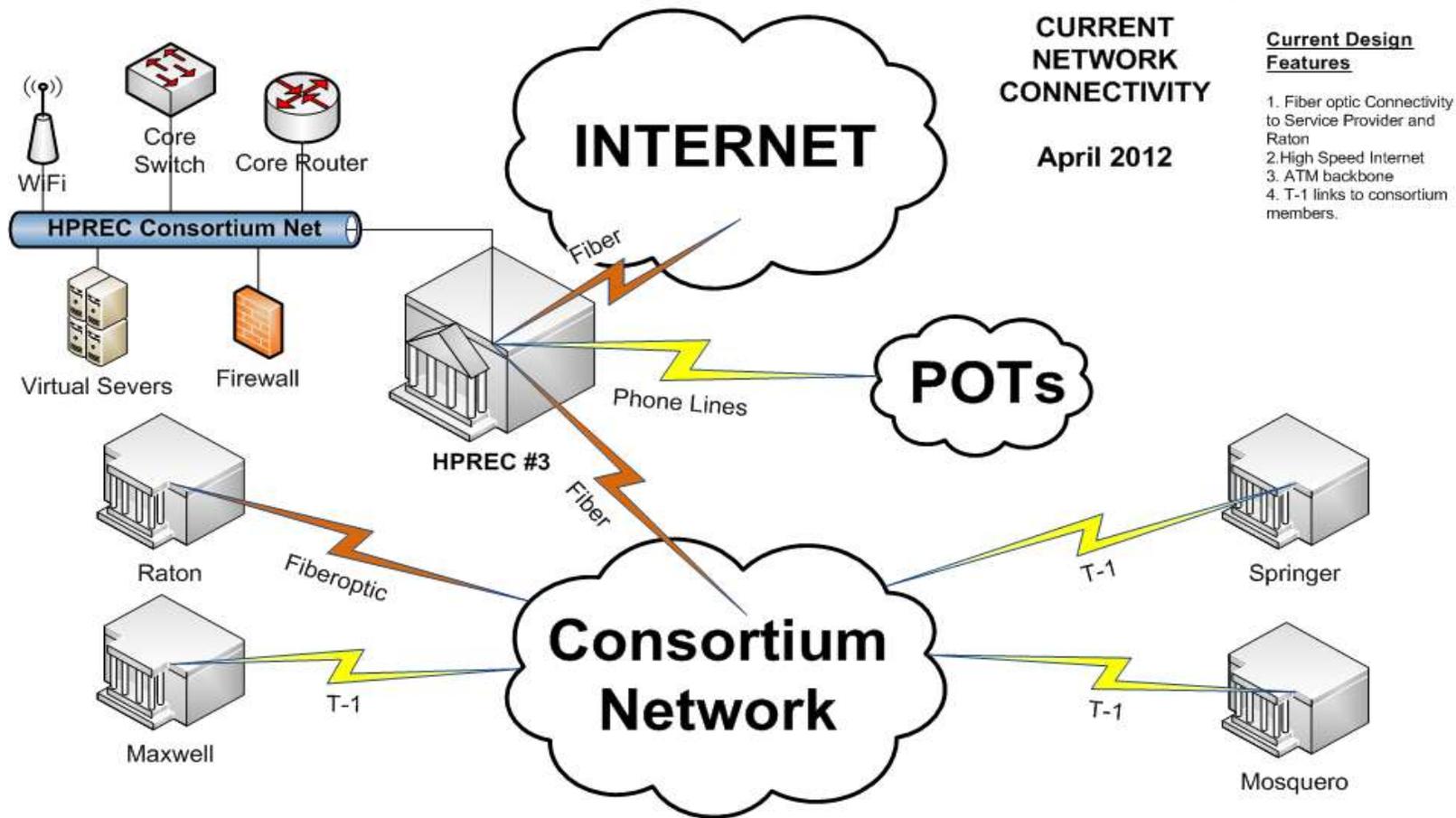
Appendix A:

High Plains Regional Education Cooperative's
Network and Connectivity Diagrams

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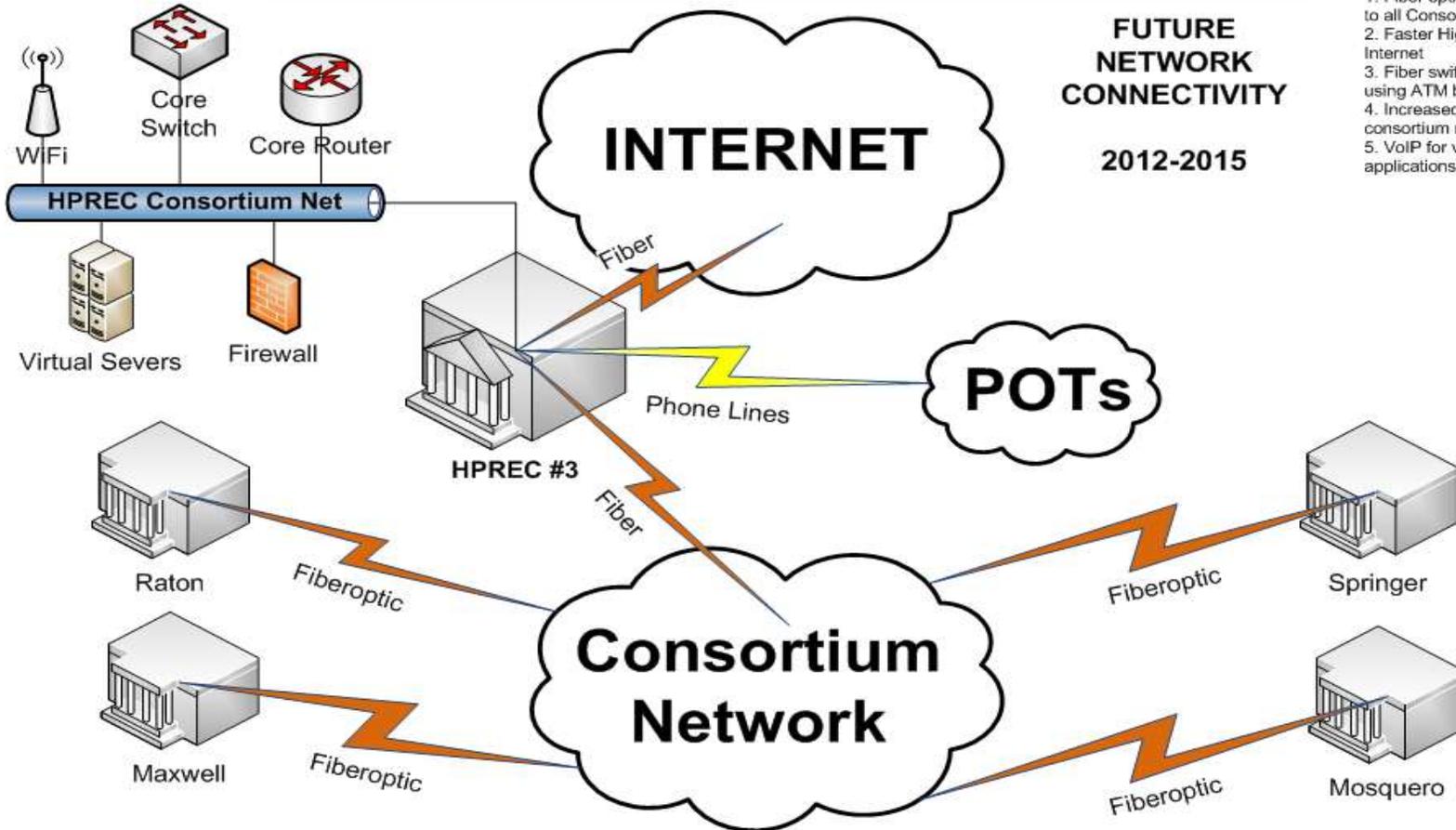


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FUTURE NETWORK CONNECTIVITY
 2012-2015

Growth Points

1. Fiber optic Connectivity to all Consortium Members
2. Faster Higher Speed Internet
3. Fiber switched versus using ATM backbone
4. Increased bandwidth to consortium members.
5. VoIP for video and voice applications.



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Appendix B:

High Plains Regional Education Cooperative's
Minutes from Board of Director's Meeting

April 17, 2012

