Appendix A

State of Maine Department of Education

in coordination with the

National Association of State Procurement Officials

PROPOSAL COVER PAGE

RFP # 201210412
MULTI-STATE LEARNING TECHNOLOGY INITIATIVE

Bidder's Organization Name: Hewlett-Packard Company		
Chief Executive - Name/Title: Meg Whitman, CEO		
Tel: 650-857-1501	Fax: 650-857-5518	E-mail: CEO.MegWhitman@hp.com
Headquarters Street Address: 3000 Hanover Street		
Headquarters City/State/Zip: Palo Alto, CA 94304-1185		
(provide information requested below if different from above)		
Lead Point of Contact for Proposal - Name/Title: Ruth Mockus, Technology Services – New Business Account Manager, New England SLED		
Tel: 508-864-1539	Fax: 508-234-0050	E-mail: mockus@hp.com
Street Address: 99 Cliffe Road		
City/State/Zip: Whitinsville, MA 01588		

Proposed Cost:	Tier 1: $314.28 per-seat per-year; See Cost Proposal Form
The proposed cost listed above is for reference purposes only, not evaluation purposes. In the event that the cost noted above does not match the Bidder's detailed cost proposal documents, then the information on the cost proposal documents will take precedence.	

- This proposal and the pricing structure contained herein will remain firm for a period of 180 days from the date and time of the bid opening.
- No personnel on the multi-state Sourcing Team or any other involved state agency participated, either directly or indirectly, in any activities relating to the preparation of the Bidder's proposal.
- No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a proposal.
- The undersigned is authorized to enter into contractual obligations on behalf of the above-named organization.

To the best of my knowledge all information provided in the enclosed proposal, both programmatic and financial, is complete and accurate at the time of submission.

	01/10/2013	Chris Backs, Manager, US Public Sector Contract Negotiators NALCS, OGC
Authorized Signature	Date	Name and Title (Typed)

Alternate Response to State of Maine Department of Education for Multi-State Learning Technology Initiative from Hewlett-Packard Company

Transforming Learning Environments

BNA/SLEDE/14019
RFP # 201210412

Hewlett-Packard Company
6600 Rockledge Drive, Suite 150
Bethesda, MD 20817
www.hp.com

January 14, 2013

State of Maine
Division of Purchases
Burton M. Cross Building
111 Sewall Street, 4th Floor
9 State House Station
Augusta ME 04333-0009

Ruth Mockus,
Technology Services –
New Business Account
Manager, New England
SLED
Tel.: +1 508.864.1539
mockus@hp.com

Amy Dupuis
Field Sales
Representative
+1 978.297.5055
amy.dupuis@hp.com

Dear Mr. Mao:

On behalf of the Hewett-Packard Company ("HP") and its subcontractors, we thank you for the opportunity to provide the State of Maine Department of Education and the National Association of State Procurement Officials (NASPO) a customer – centric approach to implement the objectives of the Multi-State Learning Technology Initiative. HP is pleased to provide a detailed plan and cost proposal of how it would accomplish the objectives of the Multi-State Learning Technology Initiative as originally outlined in RFP 201210412, and proceed with negotiating an agreement with the State to fulfill these requirements.

We believe that HP is uniquely qualified to partner with the State of Maine and NASPO to successfully implement the Learning Technology Initiative, given HP's proven ability to deliver a "managed-services" project. HP's qualifications and advantages are outlined in the following Executive Summary.

HP appreciates the opportunity to have negotiations with the State of Maine/NASPO for this Initiative and we look forward to a mutually successful outcome. Please contact Ruth Mockus, Technology Services – New Business Account Manager, New England SLED at 508.864.1539, mockus@hp.com, or Amy Dupuis, Field Sales Representative at 978.297.5055, amy.dupuis@hp.com regarding any questions you may have.

Sincerely,

Ruth M. Mockus

Amy Dupuis

Ruth Mockus
Technology Services
New Business Account Manager
New England SLED

Amy Dupuis
Field Sales Representative

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Executive Summary

On behalf of Hewlett-Packard Company (HP) please find the enclosed proposal as our response to the State of Maine Department of Education Multi-State Learning Technology Initiative (MLTI) RFP # 201210412. HP at the direction of the State has used the RFP with amendments as the guide to this submission. HP's proposal includes the following:

- A partner strategy that includes Education Networks of America (ENA), SMaRT Technology Services, Dynamic Edge and Black Box Networking Services (Black Box).
- A hardware platform that fully supports the Multi-State Learning Technology Initiative requirements.
- Software including operating systems and educational applications and rights to new versions on new devices.
- Wireless Network Infrastructure managed and deployed by ENA.
- Deployment, user training, and repair for the installed portable computing devices.
- Customized Professional Development curriculum for teachers and administrators.
- A dedicated Project Management Office.
- HP Executive Level Sponsor.

Partner Strategy

HP has chosen to partner with companies that complement the strengths of HP to deliver and to help enhance the success of the Multi-State Learning Technology Initiative.

Education Networks of America (ENA)—ENA was founded in 1996 and for the last 17 years has been servicing the K-12 educational community with district and statewide managed connectivity, communication and collaboration solutions as well as productivity tools. In the beginning, ENA created one of the first statewide K-12 networks in the US, connecting all schools and school districts in the state of Tennessee. Today, as part of ENA's service delivery they serve six statewide contracts and many of the largest school systems in the country with Internet Access, Wide Area Networks, Interconnected VOIP, and Video Services. ENA provides connectivity to over 5,385 end sites, 580 school districts, and 250 libraries serving more than 3.1 million students, teachers, and administrators and more than 6.2 million librarians and patrons throughout the US.

SMaRT Technology Services (SMaRT)—SMaRT is a Chicago-based, privately-held Information Technology services and consulting firm that is also certified to do business as a Minority Business Enterprise (MBE). With more than 14 years of experience developing and delivering custom, innovative technology services solutions for educational institutions, government agencies, commercial and private businesses, and not-for-profit organizations, SMaRT's core competencies include Help Desk/Support Center Service as well as depot, staging, imaging and shipping/logistics for desktop and portable computing devices. Among numerous large scale engagements, SMaRT currently provides help desk and onsite support for computing devices, network and peripheral equipment at 650 Chicago Public Schools.

Dynamic Edge (DE)—Dynamic Edge was founded in 1999 and provides award-winning technology service support to a diverse list of businesses in multiple states. DE is a pioneer in automation tools and focuses on security, asset management, service automation, and proactive support. Notable projects include the creation of operational accountability systems supporting more than 85,000 active users and the development of rapid deployment image build technology and supporting methodology. This rapid deployment process was used to perform hardware upgrades on 2,240 servers and the 22,500 workstations connected to these devices. It took place at 1,250 locations in six countries and was completed in less than ten weeks. Today, DE uses these service automation techniques and processes to deliver an exceptional user experience.

Black Box Networking Services (Black Box)—Black Box is a trusted provider of comprehensive communications and infrastructure solutions. As a value-added reseller of platforms and applications from the industry's top manufacturers, and a provider of its own line of technology products and services, Black Box designs, builds, and maintains today's complex voice and data networks.

HP has selected Black Box, a long time strategic partner of HP's to provide depot level services on the portable computing devices HP will be providing.

Hardware and Software—HP mobility solutions are built on industry-standard Intel® hardware and Microsoft® operating systems, applications, and security tools. This addresses the critical requirement for Students/Teachers to be able to "Access/Consume" information, but also "Create" information and data. HP is proposing, in two separate proposals, the ProBook 4440 and our new fully serviceable Windows8 ElitePad tablet, both of which meets or exceeds all specifications of the RFP. This proposal is specifically in support of the ElitePad tablet. HP is also proposing a suite of educational software that also exceeds the requirements of the RFP.

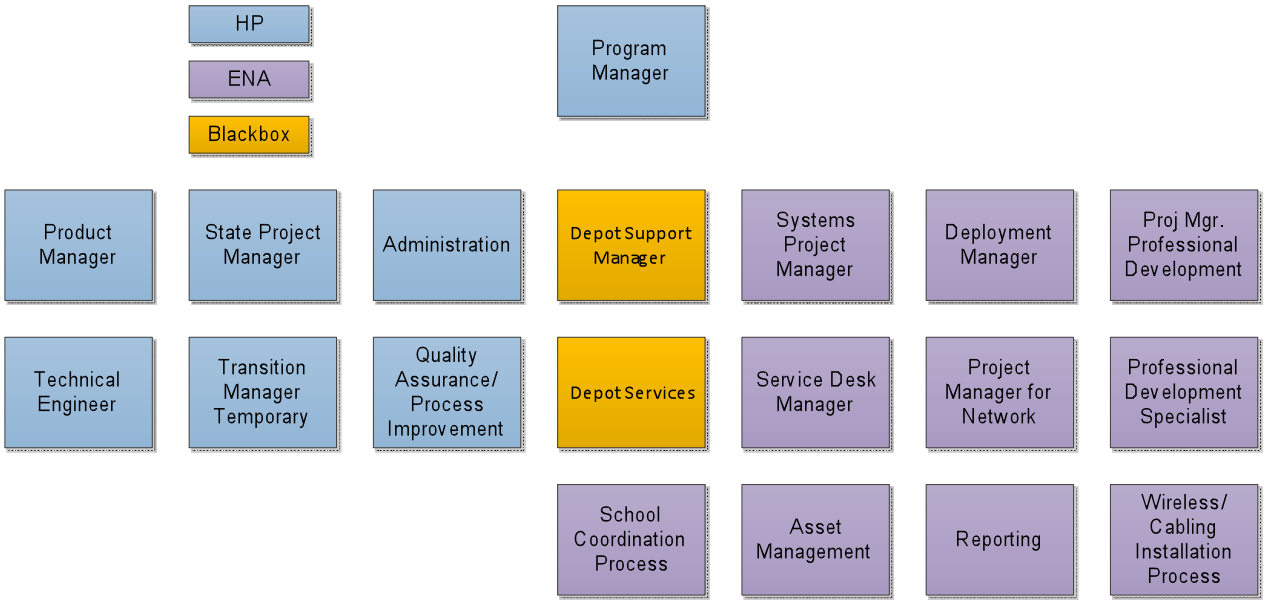
Wireless Infrastructure—ENA will provide all of the Wireless Infrastructure in response to the requirements defined in the RFP associated with wireless infrastructure. ENA has extensive and current experience in managing multiple State education networks and is uniquely positioned to design, implement, and support the wireless infrastructure requirements of the RFP.

Deployment, Training and Support—HP and our certified partners will support the Multi-State Learning Technology Initiative by Image testing, deployment, and technology support. The solution will provide the professional development curriculum most critical to the long term measurable student success.

Leasing—HP will provide the leasing solution to enable the customers to bundle all of the product and software, and services into a price per seat solution.

Project Management Office—In response to the RFP and to insure a successful Initiative, HP is proposing a Project Management Office (PMO). HP's PMO will be staffed by experienced members representing HP and its subcontracted partners.

Figure 1. Project Organization Structure



Executive Sponsorship

HP has assigned a senior level executive, knowledgeable about this initiative, and the Program to be a single point of escalation within HP for issues that cannot be resolved by HP's PMO.

Summary

HP is uniquely qualified to successfully implement the requirements for the State of Maine's Multi-State Learning Technology Initiative, as defined in RFP# 201210412. HP has extensive operations across the USA and years of experience understanding the unique needs of the statewide community. We have a core competency providing managed services to large public sector programs, including highly-effective Program Management.

HP has assembled a strong team of professionals with experience in on-premise and remote learning and management solutions. As a team we believe we bring a comprehensive solution to exceed many of the requirements of the original RFP.

Section I—Organization Qualifications and Experience

1. Description of the Organization

Present a detailed statement of qualifications and summary of relevant experience. If subcontractors are to be used, provide a list that specifies the name, address, phone number, contact person, and a brief description of the subcontractors' organizational capacity and qualifications.

Response:

HP's Commitment to Education

HP has a long history of being closely linked to the higher-education community. In the company's early years both Mr. Hewlett and Mr. Packard would consult with aspiring engineers and students as to how to build the best products for the marketplace.

Today, HP maintains this strong commitment to higher education. We seek guidance from the higher-education community on how to be a better provider of technology. We also seek to be the leading provider of technology products and services to education by creating value for students, educators, and institutions. We pledge to be the easiest to do business with and a lead contributor to advancements in the effective use of technology to improve learning outcomes.

State of Maine and NASPO should be confident in partnering with HP, as we are unique among all technology companies in our depth of innovative products and services for your community of learners, teachers, and researchers. Creating a campus environment "without limits" is something we are passionate about and take very seriously. As we look to the future, HP is unsurpassed not only in meeting the needs of today's campuses but also in preparing campuses to meet the needs of tomorrow's inspired students.

HP and Higher Education

> *"Simply turning over a check to his favorite school or college does not end the businessman's responsibility to education."*
>
> — Dave Packard, 1966

PC technology is in an exciting evolutionary state. With the development of a multitude of access devices and platforms, as well as constant and expanding integration into student's lifestyles, the higher-education computing environment is becoming increasingly complex. Campuses are looking for solutions to simplify the daily and long-term computing needs of faculty, staff, and students. All with a goal of providing for better academic results while decreasing the impact on the campus IT budget.

HP addresses this challenge by investing in computing innovations and advances in technology that provide a better customer experience for you, your faculty, your staff, and your student body. Some examples include:

- Mobility—In addition to our lineup of notebooks, workstations, and Netbooks, we have also included a full device management solution. This lets the HP MLTI support staff along with local state and district technology teams streamline portable computing devices deployments, migration, and replacement. Over-the-air device configuration allows for remote firmware ROM updates, active error monitoring, and remote detection and repair. We can also boost mobile security with remote device lock and unlock, remote wipe, and over-the-air push of security applications. This is provided through HP and our partners' own tool sets and in collaboration with such partners as Computrace.
- Damage Protection—With our Accidental Damage Protection Care Pack, State of Maine's portable computing devices will be replaced quickly in the event of an accident. The service covers all parts and labor. More importantly, it also covers a complete range of damage that warranty or service contracts do not. This includes damage that is highly likely to occur in a campus environment, including unintentional spills, drops, falls, and collisions.
- Energy Efficiency—HP continues to "go green" to reduce the impact on our environment and save you money. For more than a decade, we have been a leader in working with industry and government groups to promote energy-saving programs and consistent global standards. In fact, HP was the first PC manufacturer to sponsor the 80PLUS program, an incentive program to integrate energy-efficient power supplies.
- Teaching with Technology—Educators around the world are using technology to improve student learning and to redesign the way they teach. Through HP's philanthropic grants to faculty in colleges and universities around the world, best practices in the effective use of technology in higher education are beginning to emerge. HP works with this consortium of thought leaders in higher education, as well as innovative software companies, to offer instructional solutions that improve student engagement, educator productivity, and learning outcomes. The result: best practices and practical tips for the effective use of technology in higher-education classrooms.

Partners

Education Networks of America (ENA)—ENA was founded in 1996 and for the last 17 years has been servicing the K-12 educational community with district and statewide managed connectivity, communication and collaboration solutions as well as productivity tools. In the beginning, ENA created one of the first statewide K-12 networks in the US, connecting all schools and school districts in the state of Tennessee. Today, as part of ENA's service delivery they serve six statewide contracts and many of the largest school systems in the country with Internet Access, Wide Area Networks, Interconnected VOIP, and Video Services. ENA provides connectivity to over 5,385 end sites, 580 school districts, and 250 libraries serving more than 3.1 million students, teachers, and administrators and more than 6.2 million librarians and patrons throughout the US.

SMaRT Technology Services (SMaRT)— SMaRT is a Chicago-based, privately-held Information Technology services and consulting firm that is also certified to do business as a Minority Business Enterprise (MBE). With more than 14 years of experience developing and delivering custom, innovative technology services solutions for educational institutions, government agencies, commercial and private businesses, and not-for-profit organizations,

SMaRT's core competencies include Help Desk/Support Center Service as well as depot, staging, imaging and shipping/logistics for desktop and portable computing devices.

Among numerous large scale engagements, SMaRT currently provides help desk and onsite support for computing devices, network and peripheral equipment at 650 Chicago Public Schools.

Dynamic Edge (DE)—Dynamic Edge was founded in 1999 and provides award-winning technology service support to a diverse list of businesses in multiple states. DE is a pioneer in automation tools and focuses on security, asset management, service automation, and proactive support. Notable projects include the creation of operational accountability systems supporting more than 85,000 active users and the development of rapid deployment image build technology and supporting methodology. This rapid deployment process was used to perform hardware upgrades on 2,240 servers and the 22,500 workstations connected to these devices. It took place at 1,250 locations in six countries and was completed in less than ten weeks. Today, DE uses these service automation techniques and processes to deliver an exceptional user experience.

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HP has selected Black Box, a long time strategic partner of HP's to provide depot level services on the portable computing devices HP will be providing.

Contact for Partners

Bob Collie
Education Networks of America (ENA)
1101 McGavock Street
Nashville, TN 37203
Phone: 615-312-6004

2. Organizational Description and Qualifications

a. List the location of the Bidder's corporate headquarters. Also, describe the current or proposed location where services will be provided or from which the contract will be managed.

Response:

Corporate Headquarters

Hewlett-Packard Company
3000 Hanover Street
Palo Alto, CA 94304-1185 USA
Phone: 650-857-1501
Fax: 650-857-5518

Proposed Location for North East States Participating in this Offering

Hewlett-Packard Company

165 Dascomb Road
Andover, MA 01810
Phone: 978-474-2000

Proposed location for National Program Management Office

Hewlett-Packard Company
State, Local and Education Services Division
6600 Rockledge Drive, Suite 150
Bethesda, Maryland 20817
Phone: 240-744-8490

b. Attach documentation of any applicable licensure requirements (or any specific credentials required).

Response:

HP will comply with business license registrations, where required by each participating State.

c. Attach a certificate of insurance on a standard Acord form (or the equivalent) evidencing the Bidder's general liability, professional liability, and any other relevant liability insurance policies that might be associated with this contract.

Response:

We have included a sample Certificate of Insurance evidencing our insurance coverage and limits. Please refer to HP Appendix A—Certificate of Liability Insurance.

3. Organizational Experience

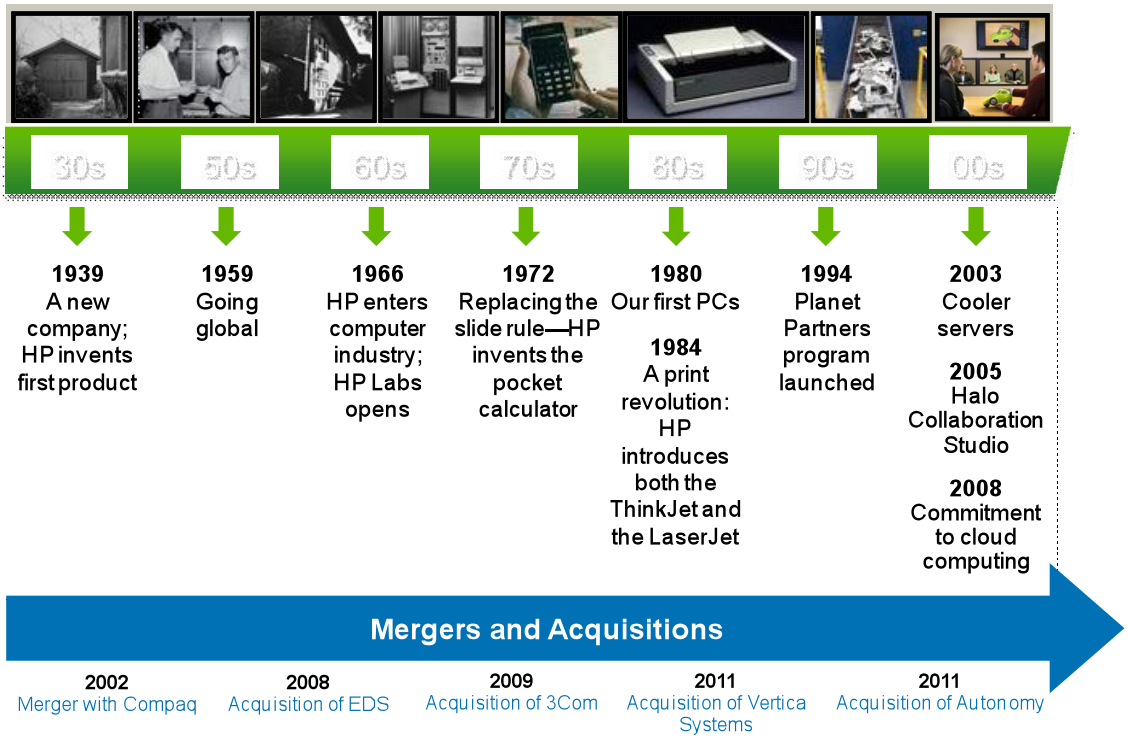
Briefly describe the history of the Bidder's organization, especially regarding skills pertinent to the specific work required by the RFP and any special or unique characteristics of the organization which would make it especially qualified to perform the required work activities. Include similar information for any subcontractors.

Response:

Hewlett-Packard (HP) was founded in 1939 by two engineers—Bill Hewlett and Dave Packard—who believed in the power of technology and the contribution it could make to our customers' lives, communities and businesses. More than 70 years later, we are still a company that applies new thinking to improve the lives and businesses of our customers.

Today HP is one of the largest technology companies in the world, with a global reach and an array of solutions that go well beyond the printers and PCs that we are famous for. At HP we are proud that our products touch so many lives, and we want you to know that this is just the beginning. We believe that technology is vital to helping us all succeed in this rapidly changing world. We believe that because we serve such a wide range of customers we have a unique perspective on their needs and an exceptional level of insight into how they may be solved. And we are committed to using our products, services, and ideas to unleash the exciting new possibilities just around the bend.

Figure 2. HP Milestones—Important Dates in HP History



In its proud history, HP has not only changed the face of technology but also changed the way that an entire industry has come to view its commitments to its people, its customers, its communities and the world.

4. Description of Experience with Similar Projects

a. Provide a description of five projects that occurred within the past five years which reflect experience and expertise needed in performing the functions described in the "Scope of Services" portion of this RFP. For each of the five examples provided, a contact person from the client organization involved should be listed, along with that person's telephone number and email address. Please note that contract history with the any states on the Sourcing Team, whether positive or negative, may be considered in rating proposals even if not provided by the Bidder.

Response:

HP submits the following five projects that occurred within the past five years which reflect experience and expertise needed in performing the functions described in the "Scope of Services" portion of this RFP:

Reference 1

Customer:	**State of Idaho – Idaho Education Network**
Customer Address:	650 West State Street, Boise, ID 83720-0027
Contact Name and Title:	Brady Kraft, IEN Technical Director
Contact Phone:	(208) 332-1840
Contact E-mail:	brady.kraft@ien.idaho.gov
Dates of Services:	July 2000 – Present

Description of Service Provided:
In 2009, the Idaho Department of Administration, Office of the Chief Information Officer (OCIO) selected ENA as the named E-Rate service provider for the Idaho Education Network (IEN) based on ENA's extensive experience in providing similar services throughout the country. The State of Idaho actively pursued a service provider that could meet the unique needs of K-12 schools and library customers and implement a model that would enable Idaho to leverage existing infrastructure and contracts with multiple telecommunications, cable and utility providers to provide a ubiquitous statewide education network with a high-level of quality support services.
The first phase of the project was completed one year ahead of schedule and nearly 16 percent under budget and connected each public high school with a scalable, high-bandwidth connection. In addition, a fully-equipped video classroom was established in each high school. ENA assumed the lead project management role in the design, provisioning and implementation of both the high-speed connectivity as well as the coordination and installation of the video classrooms and now provides the overall network management, monitoring and ongoing support for all components of the service, which includes **Internet services, wide area data transport and video services (interactive and streaming).** In addition, ENA provides extensive support to the state and the individual school districts for the State Consortium E-Rate application and the districts' individual applications.

Reference 2

Customer:	**State of Indiana - Indiana Department of Education**
Customer Address:	151 West Ohio Street, Indianapolis, IN 46207
Contact Name and Title:	Dr. John B. Keller, Assistant Superintendent for Technology
Contact Phone:	(317) 234-5703
Contact E-mail:	jkeller@doe.in.gov
Contact Fax:	(317) 232-8004
Dates of Service:	July 2005 to Present

Description of Service Provided:
In 2005, ENA was selected as the managed Internet service provider for the K-12 school corporations (districts) across the state of Indiana. This contract required a transition of approximately 580 existing circuits (ranging from single and multiple T-1s to 45 Mbps DS3s per location) at over 300 school district sites prior to beginning the 2005-2006 school year.
The network transition was completed successfully within three months and with school corporations experiencing virtually no downtime. ENA designed, provisioned and implemented all components necessary and is responsible for ongoing network monitoring and management, Customer Technical Assistance Center (CTAC) and customer support.

This statewide service contract was re-bid in 2009 and ENA was deemed the successful respondent and awarded the new contract. Throughout each contract term, ENA has managed this statewide education network by coordinating service delivery with over 40 infrastructure providers (telecommunications companies, cable companies and others) and has continually evaluated new technologies and options for delivering service at each site to provide performance enhancements or additional cost savings.

ENA also assists the Indiana Department of Education in equitably distributing state connectivity funds and completing the annual State Consortium E-Rate application. Indiana school corporations are active users of videoconferencing and distance learning services.

Reference 3

Customer:	**Tennessee Statewide Consortium through Metro-Nashville Public Schools**
Customer Address:	2601 Bransford Avenue, Nashville, TN 37204
Contact Name and Title:	John Williams, Executive Director of Information Systems
Contact Phone:	(615) 259-8433
Contact E-mail:	john.williams@mnps.org
Contact Fax:	(615) 291-6431
Dates of Service:	July 1998 to Present

Description of Services Provided:
Metropolitan Nashville Public Schools (MNPS) is Tennessee's second largest school district with approximately 73,000 students and 146 school sites. ENA has provided managed network and Internet access services to MNPS since July 1998, utilizing a variety of technologies. MNPS is in the process of implementing ENA's Interconnected VoIP solution, ENA SmartVoice, and desktop videoconferencing solution, ENA Live, in a phased approach, similar to the fiber project noted above.

MNPS is the Consortium Lead for the Tennessee Statewide Connectivity Consortium. An overwhelming majority of Tennessee school districts have opted into this statewide consortium and purchase a variety of services, including Internet access, wide area network services, Interconnected VoIP and videoconferencing services. In addition to the services listed above, ENA provides statewide hosted content filtering, firewall services and extensive traffic management services in support of district-wide applications such as their student management system

Reference 4

Customer:	State of Washington – Kent School District
Customer Address:	650 West State Street, Boise, ID 83720-0027
Contact Name and Title:	Thuan Nguyen, Assistant Superintendent & CIO
Contact Phone:	(253) 373-7904
Contact E-mail:	Thuan.Nguyen@kent.k12.wa.us
Dates of Services:	July 2000 – Present

Description of Service Provided:
Kent School District manages one of the most mature student 1:1 programs in Washington State, the "One-to-One" Initiative".

For more information, see http://www1.kent.k12.wa.us/ksd/it/one2one/. Starting in September 2009, 7th and 8th graders in the District began receiving laptop computers and beginning fall of 2012, 10th graders began receiving laptops. Some 9,000 students now have constant access to HP laptops throughout the entire school year. A local HP partner provides services of warehousing, asset tagging, imaging, engraving, delivery and warranty support.

Reference 5

Customer:	**State of South Carolina - Kershaw County School District**
Customer Address:	2029 West DeKalb St., Camden, SC 29020-7093
Contact Name and Title:	Kerry Morgan, K-8 Supervisor
Contact Phone:	(803) 669-4238
Contact E-mail:	kerry.morgan@kcsdschools.net
Dates of Service:	July 2004 to Present

Description of Service Provided:
Kershaw County School District (KCSD), located in Camden, South Carolina, is home to almost 10,000 students and over 1,300 employees. The district has three high schools, four middle schools, eleven elementary schools, one career center, one alternative school, and one adult education program.
In 2004, KCSD selected HP to install and manage a wireless infrastructure, printers, and portable computing devices with a four-year refresh cycle. This was a one year agreement with eight one-year extensions. HP is completing its eighth year delivering this service, and supplying over 1,000 new laptops annually to incoming high school freshmen. The iCan Project expanded from initially servicing the KSCD high schools to include all KCSD K-8 schools.

HP initially supplied three onsite technicians and by 2012 KCSD was utilizing fifteen on-site technicians aimed at extending the use of mobile technology across the KCSD to enhance the learning experience of the children of Kershaw County. Based upon our understanding of Kershaw County School District's objectives for this wireless mobile initiative, HP, in conjunction with our industry-leading partners, proposed a comprehensive solution for provisioning, managing, and supporting portable computing devices for students, teachers, and administrators.

b. If the Bidder has not provided similar services, note this, and describe experience with projects that highlight the Bidder's general capabilities.

Response:

HP has experience that occurred within the past five years which reflect experience and expertise needed in performing the functions described in the "Scope of Services" portion of this RFP, and has provided references as requested.

Section II—Specifications of Work to be Performed

1. Services to be Provided

Discuss in detail the Scope of Services referenced above in this RFP and what the Bidder will offer. Give particular attention to describing the methods and resources you will use and how you will accomplish the tasks involved. If subcontractors are involved, clearly identify the work each will perform.

Response:

HP acknowledges and understands. Details are in the following sections.

Part II – Scope of Services

1. Scope of Work

1.1. Bidder Response to Service Specifications and Requirements

Part II, SCOPE OF SERVICES represents the State of Maine's specifications and requirements for its Learning Technology Wireless Classroom Solution. It also includes the information required to be supplied by the Bidder as part of its response to this proposal. For each requirement in **Part II, SCOPE OF SERVICES**, each Bidder must respond appropriately. Failure of the Bidder to provide completely the required information as specified in each of the bullets below may result in the Bidder's proposal not achieving its maximum scoring potential during the evaluation process.

- The appropriate response to some requirements may simply be for the Bidder to acknowledge and to agree to comply fully with the requirement.
- More typically, the Bidder must specify and describe how its solution meets or exceeds the requirements.
- Each Bidder must also specify, describe and clarify its proposal's characteristics and strengths as well as any weaknesses or limiting factors.

Response:

HP acknowledges and understands.

Complete instructions are in **Part IV, PROPOSAL SUBMISSION REQUIREMENTS**.

Response:

HP acknowledges and understands.

2. Overview

Maine's state learning technology plan enacted by the Legislature in June 2001 must provide for:

- Portable computing devices for every 7-12th grade student and teacher with functional software appropriate to grade level;
- Obtaining basic research information and databases;

- An alternative equivalent value factor option to school administrative units if they meet the standards of the learning technology plan;
- Teacher technology and professional development;
- External and internal networks and technical support;
- Costs for replacement of portable computing devices, servers and other equipment; and
- An evaluation component.

Not all of these items are included in this RFP. Please see **Part II, Section 4, Services Provided by Other Entities** for general information, and **Appendix E, State Profiles**, for descriptions of state-specific services provided by other entities.

A copy of Maine's state learning technology plan may be downloaded at:

http://maine.gov/mlti/resources/history/mlterpt.pdf

This plan led to the successful creation of the Maine Learning Technology Initiative (MLTI) that has provided notebook computers to every 7th and 8th grade students in Maine public schools since the 2002-2003 school year. The original MLTI solution was procured via a Request For Proposals (RFP) that led to the deployment of over 36,000 notebook computers, the installation of over 230 wireless 802.11b networks, and hundreds of hours of professional development for teachers, school administrators, and technology support personnel. In 2006, a second RFP was issued that led to the deployment of over 45,000 notebook computers, the installation of new 802.11b/g wireless networks, and hundreds of hours of professional development. Prior to the expiration of the second contract, the State of Maine renegotiated the agreement to allow for the expansion of the program to Maine's high schools. In 2009, MLTI deployed nearly 75,000 notebook computers to its middle schools and over half of Maine's high schools, installed new 802.11 b/g/n wireless networks, and again provided hundreds of hours of professional development.

This RFP seeks the next generation solution for the Maine Learning Technology Initiative. In addition, working collaboratively with NASPO, it seeks to broaden the opportunity for other states to implement similar solutions for schools across the country. With the wide adoption of the Common Core State Standards and the development of the Next Generation Science Standards, the opportunity for States to collaborate and share is vast. The learning targets are the very much the same in many states. However, just as good teaching requires personalization to meet a student's needs, the implementation of a 1:1 program will require some personalization to meet each state's needs. Throughout this RFP, Bidders are asked to respond to functional requirements and other provisions of the RFP. In many places, Bidders are not specifically asked for responses specific to Maine or any state in particular. These are areas that the sourcing team believed to be general and applicable to all. In other places, Bidders will find specific instructions or descriptions specific to Maine or another sourcing team state (Hawaii or Vermont). This RFP seeks Bidders able to provide both a dependable, robust solution and the flexibility to tailor certain aspects to the individual needs of states.

Response:

HP acknowledges and understands.

2.1. Maine Education Strategic Plan

The MLTI is a critical component of a larger system envisioned by Maine's Education Strategic plan, "Education Evolving: Maine's Plan for Putting Learners First" (http://www.maine.gov/doe/plan/). The plan is shaped around five core priority areas that address the various elements of building an education system focused on the needs of all learners:

- Effective, Learner-Centered Instruction
- Great Teachers and Leaders
- Multiple Pathways for Learner Achievement
- Comprehensive School and Community Supports
- Coordinated and Effective State Support

Bidders should consider the Plan as it designs its solution.

Response:

HP acknowledges and understands.

3. Scope of Procurement: Learning Technology Wireless Classroom Solution

The awarded Bidder(s) must provide a solution that is both functionally complete and cost-effective. The Provider must demonstrate the ability, capacity, and flexibility to collaborate successfully and actively with the participating state, as well as schools and any other state partner that may wish to be involved, through its own participating addendum.

Response:

HP acknowledges and understands.

3.1. Maine Scope of Procurement

In order to secure the vision described in Part II, the State of Maine seeks to procure services that would provide personal, portable computing devices with suitable basic applications and functionality for all 7th through 12th grade students and teachers. In addition to these devices, the State of Maine seeks to procure installed or upgraded wireless networks for all participating middle and high schools as necessary, appropriate server capacity, professional development and technical support. The procurement sought will also include a number of optional schedules for equipment or services that local school units or other entities may choose to take advantage of at their own expense.

Response:

HP acknowledges and understands.

3.2. Hawaii Scope of Procurement

Digital Materials Using Tablets and Laptops

Hawaii's "Digital Materials Using Tablets and Laptops" approach means that the state will separately purchase curricular materials with a digital component.

To ensure all students are able to access the digital components of the curriculum, the state is currently planning to purchase tablets for elementary and middle grades and laptops for grades 9-12. Digital materials are easily updated at little to no cost and leveraging statewide buying power will also result in lower per-unit costs. The purchase of a digital curricular package will include professional development and technical assistance from the publisher and the contract to purchase tablets will also include corresponding technical assistance to complement the curricular package. Finally, the devices will serve multiple purposes as the end of course exams, bridge HSA (Hawaii State Assessment), and Smarter Balanced assessments will all be computer-based and delivered online.

Response:

HP acknowledges and understands.

4. Services Provided By Other Entities

This subsection describes in general terms the services critical to the success of the statewide initiative that are provided in whole or in part by an entity other than the Provider. As described in this section, the Bidder will be responsible to coordinate the design and deployment of the bid solution in order to appropriately complement and leverage these activities or resources. Some of these items are described more fully hereafter in conjunction with the relevant specifications. Note that this list is not exhaustive.

4.1. Building Preparedness

Each local school unit that opts to participate in this program shall be responsible to ensure minimum building readiness for the installation of the bid solution. The local school unit shall address structural issues, construction/renovation, abatement, and electrical wiring needs, based on specifications supplied by the Provider. The bid solution should be designed to minimize necessary costs of building preparation.

Response:

HP acknowledges and understands.

4.2. Connectivity and Adequate Bandwidth to Each School Building

Each local school unit that opts to participate in this program shall be responsible to ensure adequate bandwidth and connectivity to the school facility. The bid solution should be designed to minimize the need to upgrade the available bandwidth at each school. Bidders should note minimum bandwidth requirements to best implement the proposed solution in its response in **Section 6.6.8, Cloud Requirements**.

Response:

HP acknowledges and understands.

4.3. Home Access to the Internet

Educators and students who participate in this program are individually responsible for providing Internet access at home. It is beyond the scope of this RFP to seek home Internet connectivity for individual users while away from the wireless infrastructure described in **Section 7, Network Connectivity and Infrastructure**.

Response:

HP acknowledges and understands.

4.4. Content, Assessment, and Integration

Many states are "local control" states with regard to curriculum and selection of instructional materials. State content standards describe what children should know and be able to do at each grade span. Many states have adopted the Common Core State Standards for English Language Arts and Mathematics. In addition, it is anticipated that many will adopt the Next Generation Science Standards in the future upon their completion. However, in local control states, local school units and classroom teachers are left with academic freedom to design lessons and select materials. Although the Bidder may include options for services regarding content, assessment tools, and other materials, any such services should be premised on a system of locally developed and selected curriculum, instruction and assessment.

Response:

HP acknowledges and understands.

4.5. Primary Research Databases

Many states have centralized, coordinated access to online and electronic content, databases, and other similar resources. While the Sourcing Team is interested in options for services regarding content, these should not be included in the per seat cost of the solution, but rather offered as optional purchases for each state to consider within the context of its own state.

Response:

HP acknowledges and understands.

4.6. Program Evaluation and Assessment

Each participating state will make provisions outside the scope of this Request for Proposal for outside analysis and evaluation of the impact and success of the project. The Provider should be prepared to supply its required reports and documents in a time, manner, and format specified by the participating state that will enable adequate program evaluation.

Response:

HP acknowledges and understands.

5. Participation by Schools

It is assumed that participation at the school level within any state that elects to participate in this program will vary significantly based on numerous differences in state policies and funding.

5.1.1. Maine school participation

All two hundred six (206) Maine middle schools (grades 7-8) are eligible to participate in the program. Since the inception of the program, 100% of Maine middle schools have participated in the program. It is estimated that one hundred twenty (120) Maine high schools (grades 9-12) are eligible to participate in the program. Starting in 2009, 55% of Maine high schools have been participating in the program.

The number of classrooms and students within schools varies widely. Maine has many small, rural schools. A significant proportion – roughly 48% – of the schools that serve 7th and 8th grade students are K-8 elementary schools.

Maine is a strong "local control" state. Although Legislature and the Department of Education provide statewide policy direction, each of Maine's 230 school units, organized on a municipal or regional basis, has an elected school board with general statutory responsibility for policy and operational oversight of each school.

The State will pay for participating middle schools including student and eligible staff seats as well as wireless networks. The State will also pay for participating high schools including eligible staff seats and wireless networks, but not student seats. Local school districts are responsible for the costs of student seats for students at participating schools in grades other than grade 7 or grade 8. It is expected that many Maine schools serving grades K-6 will also wish to participate in this program. Please see **Section 6.8.1, Pricing Schedule for Additional Educational Groups** for more information about Maine K-6 schools. All devices for participating Maine public schools, regardless of the grade level served, will be purchased by the Department of Education under the resulting Agreement. For students or staff that do not meet the eligibility requirements, the Department will invoice the schools directly for reimbursement to the Department. Therefore, all invoicing and payments for Maine public schools will be done solely with the Department.

While it is expected that all of Maine middle schools and most Maine high schools will participate in the program, schools will do so on an opt-in basis. Every public middle school in the State participated in the first, second, and third MLTI deployment. Additionally, some Maine elementary and private/independent schools elected to participate at local cost. However, some school units may elect not to participate. Other school units may elect for an alternative deployment. It is anticipated that schools that do not opt-in initially would retain the right to opt-in, at a minimum for Year 2 (the 2014-15 school year). Based on the solution proposed by the winning Bidder, the Department will require in May 2013 a formal statement of intent to participate from school units.

Response:

HP acknowledges and understands.

5.1.1.1. Maine Alternative Deployments

Maine middle schools may also elect to participate in an alternative one-to-one deployment, using different devices or configurations than that provided by the State-funded solution from the Provider. This alternative deployment could utilize an optional cost schedule for upgrades or enhancement offered by the Provider, or the school unit at its discretion could utilize equipment or services from some other vendor. If a school's alternative deployment satisfies criteria to be established by the Department, the State would provide to that school – for those service components that are susceptible to disaggregation -- funds equal to the component(s) of the State-funded solution. The local school unit would have sole responsibility for any additional costs, beyond the State-funded solution, associated with the alternative deployment.

Response:

HP acknowledges and understands.

5.1.2. Hawaii school participation

All Hawaii Department of Education public schools are expected to participate in this program. The Hawaii Department of Education consists of approximately 260 unique schools with a total enrollment of approximately 175,000 statewide. The procurement of these devices is expected to be phased over a three-year period, with five new complex areas (districts) added each year. Hawaii estimates it will deploy devices to approximately 60,000 students and staff annually until the third year of implementation, when essentially all staff and students statewide have a device. Procurement will be subject to availability of funds. This phased approach was chosen as opposed to a grade level approach because it honors the commitment to a K-12 construct and powerful K-12 articulation. By allowing Complex Area Superintendents and principals to opt in to the phases we are more likely to have those who are willing and able be early implementers and therefore lead the way to a more successful implementation. Selection of Complexes or Complex areas will be made by the office of the State Superintendent, and will be based on technology readiness, leadership readiness and staff readiness. Please refer to **Appendix E, State Profiles - Hawaii** for technical readiness details.

Response:

HP acknowledges and understands.

5.1.3. Vermont school participation

Presently, Vermont does not have statutory guidance for participation in this program. As such, it expects participation from schools serving students across all grade levels, K-12, based upon local decision-making.

Response:

HP acknowledges and understands.

5.2. Opt-in

Participating states will coordinate with the Provider and its local schools to determine participation. Schools will be required to opt-in to the program by agreeing to terms and conditions between the state and the local school system. These terms and conditions will vary from state to state. The Provider is expected to assist participating states with the dissemination of information about the solution in order to ensure that local schools make informed decisions.

Response:

HP acknowledges and understands.

5.2.1. Maine Opt-in

It is anticipated that the Maine Department of Education will require a formal opt-in from its schools no later than May of 2013. The timing of the opt-in may vary based upon the Bidder's solution.

Response:

HP acknowledges and understands.

5.2.2. Hawaii Opt-in

It is anticipated that Hawaii schools will participate on an opt-in basis. Because Hawaii schools will rely on state funds to be able to participate in this program, it is expected that State leadership will ultimately determine schools, complex, or complex area participation in the program.

Response:

HP acknowledges and understands.

5.2.3. Vermont Opt-in

It is anticipated that Vermont schools will participate on an opt-in basis. Because Vermont schools will rely on local funds to be able to participate in this program, it is expected that not all local schools or districts will elect to participate in the program.

Response:

HP acknowledges and understands.

5.3. Full Deployment

All participating schools that opt in initially are required to be fully deployed for the start of the 2013-2014 school year. Schools that opt in at a later date would be deployed as soon as practicable.

Response:

HP acknowledges and understands.

5.3.1. Maine Deployment

Bidders should note that some schools in the Aroostook County region of Maine begin school in early August. The Department will coordinate with the Provider to prioritize deployment and installations based upon the various Maine school system calendars.

Response:

HP acknowledges and understands.

5.3.2. Hawaii Deployment

Bidders should note that some schools Hawaii begin earlier in the year than most other states (July 29th). Training would theoretically need to be done in June/early July.

Response:

HP acknowledges and understands.

5.3.3. Vermont Deployment

Ideally, delivery of devices would take place in May or June of 2013 in anticipation of the Fall semester. Training would be done in June/July to prepare for Fall semester.

Response:

HP acknowledges and understands.

6. Personal Computing Device & Software Applications

A portable, wireless computing device will be provided for each participating user in participating schools. All devices will be deployed in the first year of the program. Participating users will be defined by each State or local school.

Response:

HP acknowledges and understands.

6.1.1. Maine Participating Users

All students in participating middle schools (7th and 8th grade) will participate in the program. Additionally, all students in participating high schools (9th through 12th grade) will participate in the program. If a school elects to participate for other grade levels, all students in that grade level will participate in the program. Each teacher, librarian, school administrator, and technical coordinator in a participating 7-12 school will participate in this program. Personnel in these schools not covered by the State's funding may optionally participate if the local school elects to pay the per seat cost for those personnel.

Response:

HP acknowledges and understands.

6.1.2. Hawaii Participating Users

All grade levels will be eligible to participate in the program. Schools not centrally funded for program by State's may, subject to state approval, optionally participate if the local school elects to pay the per seat cost for those personnel and students.

Response:

HP acknowledges and understands.

6.1.3. Vermont Participating Users

All grade levels will be eligible to participate in the program. All students may optionally participate if the local school elects to pay the per seat cost for those personnel and students.

Response:

HP acknowledges and understands.

6.2. Device Quantities

6.2.1. Teachers and Staff

Participating educators and school personnel (which may include teachers, librarians, school administrators, technical coordinators, and more) will be equipped with a portable computing device (hereafter referred to as the “teacher’s” device). The teacher’s device may be the same as the student’s device or may be a more fully capable device. Either way, the teacher’s device must satisfy educational and practical functional goals in the classroom and for lesson preparation.

Response:

HP acknowledges and understands.

6.2.1.1. Maine Teachers and Staff

Classroom teachers in all content areas, special education teachers, literacy specialists, librarians and itinerant teachers will all receive a computing device. In addition, school administrators including principals, assistant principals, special education directors, technology directors, technology integrators, and others will be equipped with a portable teacher's device. The Department will work with schools to determine the exact number of eligible staff for each school. In 2009, the Department's initial count for total eligible staff for grades 7-12 was 11,869.

Response:

HP acknowledges and understands.

6.2.1.2. Hawaii Teachers and Staff

At a minimum, classroom teachers in Math and Language content areas, special education teachers, literacy specialists, librarians and itinerant teachers will all receive a computing device. Hawaii will ensure that all classroom teachers will eventually have a device. The Hawaii Department will work with schools to determine the exact number of eligible staff for each school.

Response:

HP acknowledges and understands.

6.2.1.3. Vermont Teachers and Staff

Because of the local nature of this opportunity, schools will determine the teachers and staff eligible to receive a portable device. The recommendation from the Vermont Department of Education will include a device for each teacher involved in the building based 1:1 program with additional devices available for staff in other content areas that are impacted by the 1:1 computing program.

Response:

HP acknowledges and understands.

6.3. Students

Each student in participating schools will be equipped with at least one portable computing device. The educational requirement is a minimum 1:1 ratio – at least one device per student.

Response:

HP acknowledges and understands.

6.3.1. Maine Students

The estimated number of Maine students is summarized in Table A below. This data is based on the spring reported enrollments (April 2012) for Maine public schools. For more detailed information, please see:

http://www.maine.gov/education/enroll/attending/statespringpub.htm

The anticipated program commences in August 2013 with the Classes of 2014 through 2019. The actual student enrollment numbers could be higher or lower.

The count could be lower if some eligible schools elect not to participate. As described in **Section 5.1.1.1 Alternate Deployments**, schools may also elect to participate in an alternative 1-to-1 deployment using different devices or configurations than that provided by the State-funded solution described by the Bidder.

TABLE A – Maine Student Count Estimates

High School Graduating Class Year	Grade in 2013-14 School Year	Estimated Student Count
Class of 2014	12	14,276
Class of 2015	11	14,494
Class of 2016	10	14,366
Class of 2017	9	14,074
Class of 2018	8	13,852
Class of 2019	7	13,698
Class of 2020	6	13,402
Class of 2021	5	13,309
Class of 2022	4	13,569
Class of 2023	3	13,688
Class of 2024	2	13,586

Response:

HP acknowledges and understands.

6.3.2. Hawaii Students

The estimated number of Hawaii students is summarized in Table B below. This data is based on the statewide projected enrollment for school year 2013-14.

TABLE B – Hawaii Student Count Estimates

Hawaii Enrollment Projections 2013-14			
Category	**High School Graduating Year**	**Grade**	**Total**
Regular Education	Class of 2026	K	15,349
	Class of 2025	1	14,303
	Class of 2024	2	13,778
	Class of 2023	3	13,336
	Class of 2022	4	12,766
	Class of 2021	5	12,502

	Class of 2020	6	11,527
	Class of 2019	7	10,874
	Class of 2018	8	11,040
	Class of 2017	9	12,194
	Class of 2016	10	11,275
	Class of 2015	11	10,549
	Class of 2014	12	9,059
		Subtotal	158,552
Special Education		K-6	8,092
		7-8	2,971
		9-12	6,119
		Subtotal	17,182
Grand Total			**175,734**

Response:

HP acknowledges and understands.

6.3.3. Vermont Students

The estimated number of Vermont students is summarized in Table C below. This data is based on a statewide projected enrollment for school year 2013-14.

TABLE C – Vermont Student Count Estimates

High School Graduating Class Year	Grade in 2013-14 School Year	Estimated Student Count
Class of 2014	12	6,883
Class of 2015	11	6,954
Class of 2016	10	6,448
Class of 2017	9	6,344
Class of 2018	8	6,250
Class of 2019	7	6,258
Class of 2020	6	6,138
Class of 2021	5	6,134
Class of 2022	4	6,164
Class of 2023	3	6,221
Class of 2024	2	6,043

Response:

HP acknowledges and understands.

6.4. Students with Disabilities

All students will receive a device except students who are determined by an individual education program (IEP) team to be unable to benefit from learning technology equipment. Ideally, all learners should benefit from the Bidder's solution. The school unit will provide additional adaptations, software, or peripheral equipment from the Provider or another vendor if necessary.

Response:

HP acknowledges and understands.

6.5. Device Functional Requirements

Bidders must complete the **Portable Computing Device Specifications Summary** included in **Appendix G – Additional Forms**. If more than one portable computing device is included in the solution, Bidders must complete one Summary Sheet per device.

Response:

HP acknowledges and understands.

6.5.1. Assessment Compatibility

The solution must meet, and ideally exceed the Hardware Purchasing Guidelines published by the Smarter Balanced Assessment Consortia (SBAC) and the Partnership for Assessment of Readiness for College and Careers (PARCC). These published guidelines may be found at:

http://www.smarterbalanced.org/smarter-balanced-assessments/technology/

http://www.parcconline.org/technology

Response:

HP acknowledges and understands.

6.5.1.1. Maine

Many Maine schools use the Northwest Evaluation Association (NWEA) formative assessment tool. It is desirable that the solution is compatible with the NWEA tool.

Response:

HP acknowledges and understands.

6.5.1.2. Hawaii

Many Hawaii schools use the Global Scholar Pinnacle Instruction Learning Management System as a formative assessment tool. It is desirable that the solution is compatible with this tool.

Response:

HP acknowledges and understands.

6.5.2. Device Connectivity

The device will be able to connect to the WiFi network and also be able to also access the school's pre-existing local network, and the Internet, wirelessly (via WiFi) within the school, home or other area outside the school. The Bidder must describe the device's native connectivity capacity as well as connectivity options including those that may require additional attachments and whether these attachments are a part of the proposed solution. The Bidder must describe its wireless network connectivity solution in detail in **Section 7, Network Connectivity and Infrastructure**.

Response:

The HP ElitePad 900 supports integrated wireless configurations 802.11 a/b/g/n (2x2) and is compliant for roaming between access points. The ElitePad's wireless supports a variety of security measures including 64- and 128-bit WEP, WPA, WPA2, and hardware-accelerated AES, 802.1 x authentication types EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP, and EAP-FAST. In addition to the wireless connection the ElitePad can utilize wired connections (10/100) Ethernet through an optional dock or dongle.

6.5.3. Device Portability

The device will be able to be carried conveniently and easily by students and teachers - either via a provided carrying case or some built-in carrying ability. The portable computing device shall be lightweight. While the Department will not mandate a specific maximum weight, as a guideline the Department would prefer to see a device and all its components that weighs six pounds or less. In general, the lighter the better.

Response:

The total solution offered is less than 3.5 lbs. The HP ElitePad 900 has a starting weight of 1.52lbs. When including HP's ElitePad Jacket and Expansion Jacket Battery the weight becomes 2.39 lbs. HP will provide a Targus Sport Netbook Sleeve, CVR215 that weighs .44 lbs.

6.5.4. Device Durability

The portable computing device must be highly durable and withstand reasonable and normal daily use by middle and high school students. It is desirable that the device shall be durable enough to withstand occasional mishaps, and resist hazards such as dust, dirt and spills – and still function. It shall also have parts that cannot be easily removed, tampered with, or broken.

In order to provide necessary protection for the device during normal transport, the Bidder may include an appropriate carry case. Ideally the case would allow schools to easily label cases for easy identification (i.e. "All black bags look alike"). Included cases shall be included in the annual per seat cost and shall be fully covered by the Provider's support and warranty program as described in **Section 9, Warranty, Insurance, Damage and Theft**.

Response:

The proposed HP ElitePad 900 is highly durable and will withstand reasonable and normal daily use by grades K through 12 students. Some of the durability features include: Enhanced durability with CNC (Computer Numerated Control) machined aluminum uni-body case, 2nd generation Gorilla Glass, and it is Mil-Std. 810G tested.

The included Targus 12" Sport Netbook Sleeve features a neoprene exterior to protect the ElitePad from scuffs. The soft handles provide a comfortable carry option. This slip case is designed to accommodate tablets with up to 12" screens. Though slim and compact, the case includes storage for business cards, keys, pens and files. Featuring a sporty color combination, with durable neoprene materials and a padded shoulder strap, the Sport Netbook case is ideal when a lightweight, low-profile case is all you need. It can be easily marked for identification.

6.5.5. Device Power

The portable computing device will have a battery capacity that will allow the device to be used throughout a standard school day without being recharged. The battery will need to have the ability to be recharged by the student at home or elsewhere or through a type of multi-unit re-charger at the school, and will need to be able to be recharged overnight or sooner. The device shall also be able to be powered by a standard electrical plug.

The Bidder must specify the recharge time, electrical load, battery life, and other relevant electrical specifications of its solution. Although each local school unit that opts to participate in this program shall be responsible to ensure minimum building readiness for the installation of the bid solution based on specifications supplied by the Provider — including electrical wiring needs — the bid solution should be designed to minimize necessary costs of building preparation in terms of adding electrical receptacles or additional power to classrooms. The proposed solution should respect the limited electrical power capacity within the school and classroom environment.

The Department recognizes that while the type of usage can impact battery life, that in general battery life is often most impacted by the display, motors, and network radios. The Bidder must describe its strategy to ensure sufficient battery life, and how its solution takes into account common battery intensive tasks.

Battery replacements and proper recycling of spent batteries will be done within the per seat cost and in such a way that does not impact teaching and learning. The Bidder must describe its plan for providing replacement batteries and for recycling spent batteries.

Response:

The HP ElitePad tablet is configured with a built in internal battery which will enable the tablet to last through a typical school day without being recharged. In addition, each unit will be bundled with an ElitePad Jacket which includes an additional embedded battery. The internal and external batteries have the ability to be recharged by the student at home or elsewhere, and/or charged in a multi-unit recharger at a school. The battery will recharge in a time period less than overnight. The HP ElitePad also can be powered by a standard electrical plug.

The HP ElitePad configuration that includes the jacket and external battery supports a 2-cell battery that provides approximately 18-21 hours of battery life. Recharge time for the system in OFF mode or Standby is 5.5 hours, while for the system on it is 6-8 hours (depending on system power consumption). The HP ElitePad uses a 10W AC adapter that will draw about 0.09A at 110V.

HP will include HP ElitePad-compatible HP Power Assistant Software (or other similar model-dependent power management software) in the master “gold image” created for the HP ElitePad.

HP will work with the State and our local logistics resource to develop an optimal set of power management settings to be deployed statewide. Our local logistics resource will utilize image management and control software to adjust power management settings as required changes are identified during this program to maximize battery life of the HP ElitePad.

HP expects the batteries proposed to satisfy the 4 year battery requirement as long as the batteries are used under normal operating conditions and are utilized fully and routinely. Additionally, allowing for discharge of the battery and fully recharging so the battery cells are exercised properly is important to extend battery life. Advances in battery technology have increased capacity and lifecycle. HP's recommends the State replace batteries on an as needed basis.

HP Support Assistant Software will be included) in the master "gold image" and includes the HP Battery Check utility which can be utilized to test current battery condition. (A current version is located at:

http://h20239.www2.hp.com/techcenter/battery/battery_ts.htm).

The HP ElitePad includes an external 10W HP Smart AC Adapter with detachable duck-heads.

The HP proposal includes 5% spare jackets and external batteries.

Should schools choose not to allow students to take devices home HP offers several options. If schools determine they wish to have greater than 5% spare jackets and external batteries these are available for purchase in (Optional Hardware Section 6.7.2.) in Appendix B Table 4 Optional Features. Optionally, schools can also purchase HP charging carts (Optional Hardware Section 6.7.2) in Appendix B Table 4 Optional Features designed to securely store and charge ElitePads inside the classroom.

There are two options: (1) a 20-unit charging cart, and (2) a 30-unit Managed Charging Cart. HP carts have a large compartment with individual, smooth-edged shelves for easy, quick, and safe loading and unloading by teachers and students, and a separate, locked IT compartment to store ElitePad power adapters (Charging and Managed Charging Carts) and Ethernet connectors (Managed Charging Carts). The HP Managed Charging Carts include Ethernet cables for convenient batch installation of software updates or virus protection.

HP retains the ownership of unit and therefore retains responsibility for the disposal of the original batteries. The replacement batteries will be disposed of by HP utilizing approved recycling processes and capabilities such as those utilized at HP's facilities within the US.

6.5.6. Keyboard

The portable computing device will have an appropriately sized keyboard function that facilitates text input, integrated into the device, into the carrying case, or some other effective method. While an ideal solution would include a standard-size keyboard, it is recognized that a smaller size may be necessary. Nonetheless, the Department seeks a keyboard interface of sufficient size and ease of use for students and teachers to be able to do their work effectively and efficiently without discomfort.

Response:

The HP ElitePad 900 has a built in software based keyboard. Optionally the HP ElitePad 900 has built in Bluetooth for use with optional keyboards and has an optional productivity jacket that will provide a keyboard.

6.5.7. Screen

The portable computing device will have a color screen of sufficient size with good resolution. While the Department will not mandate a screen size, the solution should take into account ease of use and functionality (as described below in **Section 6.6, Software and Function** as well as any requirements defined in **Section 6.5.1, Assessment Compatibility**). In general, the higher the resolution the better. The Provider should keep in mind portability, size, and weight.

Response:

The ElitePad utilizes a 16:10 aspect ratio which provides a 5% larger screen compared to other devices utilizing a 10.1" 16:9 aspect ratio, additional the ElitePad's aspect ratio is balanced for both computing and tablet functionality in both portrait and landscape orientations and provides a great user experience without one orientation feeling too long – which is common on 16:9 tablets.

6.5.8. Mouse/Pointing Function

The portable computing device will have a mouse/pointing capability that provides pointing functions and is easy to use. It is preferable for pointing functions to be integrated into the device (e.g. trackpad, track point, touch screen, etc.) and not rely on a separate attachment.

Response:

The HP ElitePad 900 has a multi-touch capacitive digitizer, chemically-strengthened Gorilla glass w/Anti-smudge coating.

6.5.9. Audio

The portable computing device will have built-in audio capabilities, including speakers for personal use and an audio-out capability that accepts standard 1/8" audio connectors for headphones or speakers. It should also include an integrated microphone and audio-in capacity.

Response:

The HP ElitePad 900 has SRS Audio with dual integrated stereo speakers.

6.5.10. Camera

The portable computing device will have an integrated, built-in camera capable of capturing/recording images and video.

Response:

The HP ElitePad 900 has two built in cameras, a 1080p front-facing camera and 8MP with LED flash rear-facing camera.

6.5.11. Size

The portable computing device will fit on school desks and be easily carried by an adolescent-aged student.

Response:

The HP ElitePad 900 meets this requirement based on overall form factor. The HP ElitePad 900 has overall dimensions of .36" x 10.28" x 7".

6.5.12. Ports

The device should ideally have additional ports/capacity for attachment of external devices. In addition, the device will be capable of connecting to standard video output devices such as digital projectors or monitors. It is desirable that the device will be compatible with common interactive white board systems.

Response:

The HP ElitePad 900 has two USB ports and one HDMI via the included expansion jacket (SmartJacket); the ElitePad utilizes a dock connector that can easily be converted to a variety of connection options including RJ-45, USB, Serial, VGA or HDMI.

6.5.13. Boot Time/Wake Time

A device that starts and is ready for use quickly is highly desirable. The Bidder must specify the boot and wake time for its device.

Response:

The HP ElitePad utilizes new technology and incorporates HP's design and implementation to provide instant boot times from a user perspective. The device utilizes several power modes for "shutdown" including sleep state, hibernate and full power cycle boot. Under sleep and hibernate the boot time is nearly instant. HP recommended that users use these power sleeps modes for best performance. For a full power cycle boot HP has an average of 19.41 seconds. The wake time is only 1 second. In addition, the HP ElitePad utilizes Windows Connected standby for Windows 8 that allows the device to check for updates, download email and check notifications from applications while in these sleep states.

6.5.14. Upgrades

Upgrades to the portable computing device, if proposed, during the term of the contract will be done within the per seat cost at a time that does not impact teaching and learning.

Response:

HP acknowledges and understands.

6.5.15. Ergonomics

The system and design will be one which can be used efficiently and comfortably with a minimum amount of fatigue or adverse physical effects. The Bidder must specify what ergonomic standards or guidelines it has adopted in its proposed design.

Response:

The HP ElitePad is ultra-thin and ergonomically shaped to easily fit your hand.

In terms of the American and International Ergonomic Standards ANSI/HFES100-2007 and ISO9241, HP has a representative on both standards bodies. In addition, an HP representative is currently co-chair of the ANSI/HFES 100-2012 revision committee, co-chair of the Input Device committee and a member of the Displays revision committee. Incidentally, HP authored a study referenced in the Monitor Viewing Angle section of ANSI/HFES100-2007. HP is also a member of the Office Ergonomics Research Committee (www.oerc.org).Through this organization we assist in the funding of leading research in the area of office ergonomics. Moreover, a HP representative is currently Treasurer of the Executive Board of this organization, and HP representatives in the past have held the position of President.

6.5.16. Accessibility

It is the intent to purchase hardware and software that provides the highest degree of accessibility to all users, including users who may have an impairment that interferes with the use of the device. The solution will have the capacity to interface with peripherals, software and assistive technologies used by students, teachers and others with visual, hearing, mobility, communication and/or cognitive impairments and will conform to the ISPB-approved Computer Application Program Accessibility Standard which can be found at:

http://www.maine.gov/oit/accessibility/software_policy.html

There must not be a need for complex and expensive adaptation and/or specialized design later to meet the needs of users. The design should communicate necessary information in as many different forms as possible (e.g., verbal, auditory, tactile, pictorial) to accommodate needs. It should be of appropriate size and should be operable in at least one mode for those with limited hand, arm, leg or trunk strength, flexibility and range of motion. Space should be provided for approach, reach, manipulation and use regardless of a user's body size, posture or mobility.

The Bidder must describe to what extent its proposed solution satisfies this requirement. This should include a description of whether and how the device provides the functionality and/or the capability to interface with peripherals, software and assistive technologies for visual, hearing, mobility, communication and cognitive impairments.

Response:

HP enterprise tablets meet this requirement with Microsoft operating system accessibility options.

HP uses the Voluntary Product Accessibility Template (VPAT) as a way to assist customers in determining how HP products support the 'Electronic and Information Accessibility Standards' set forth in regulations of the US Architectural and Transportation Barriers Compliance Board (36 CFR Part 1194), which implements Section 508 of the Rehabilitation Act (29 USC 794d), as amended by P.L. No. 106-246 (July 13, 2000).

Each VPAT provides a summary and detail level description how HP products conform to specific Section 508 standards.

For more details, please refer to this link: http://v4nzpro.houston.hp.com/508Accessibility/.

6.5.17. Disposal

The Provider will ensure that no devices or materials supplied by it are disposed of improperly. The Provider will ensure that associated hazardous constituents are kept out of solid waste and wastewater. Examples of possible hazardous constituents are: printed circuit boards, lithium batteries, and mercury-containing lamps for screen illumination. It is desirable that the device is highly recyclable. The Department recognizes that eventually, the devices will be retired from use and wants to minimize the environmental impact of the equipment deployed as part of the solution.

Response:

The HP ElitePad is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2002/95/EC.

This HP ElitePad is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive - 2002/96/EC.

This HP ElitePad is Energy Star/EPEAT Silver compliant, MSH/OBL compliant, E-Standby compliant, and has DLNA certification.

This HP ElitePad is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).

HP is recognized as an industry leader globally on the question of proper handling and disposal of all materials used in manufacturing, repair, replacement, and packaging. HP 100% recycles. No materials of any kind that HP utilizes in this program will be improperly disposed of in any state, or anywhere else in the world. HP dedicates itself to being environmentally friendly.

6.6. Software and Function

6.6.1. Applications

The MLTI has adopted and promoted two models to guide teacher practice and the integration of technology into instruction and learning. These models are *Technological, Pedagogical, Content Knowledge* (TPCK) by Drs. Punya Mischra and Matthew Koehler (http://www.tpck.org) and *Substitution, Augmentation, Modification, Redefinition* (SAMR) by Dr. Ruben Puentedura (http://www.mlti.org/samr and http://www.hippasus.com/rrpweblog/). Bidders must describe the tools and functionalities included in the solution and their anticipated use in light of these models.

The solution must, at a minimum, provide the students and teachers with software to facilitate the following functions to support educational needs:

6.6.1.1. Writing (e.g., word processing, journaling, communications, editing and revision, sharing, etc.)

Response:

As the core focus of this section applies to software applications, responses in this section are presented on behalf of HP and Microsoft.

HP and Microsoft understands and enables the models promoted by MLTI, guiding teacher practice and integration of technology into instruction and learning:

The Technological Pedagogical Content Knowledge model advanced by TPACK and the Substitution, Augmentation, Modification, Redefinition (SAMR) model advocated by Hippasus.

HP and Microsoft advocate innovative technology practices and delivers teachers training and workshops supporting educator technological, pedagogical, and content knowledge, such as delivering workshops and training through Microsoft's Partners in Learning (PiL) team. TPACK (TPCK) is recognized for its contribution to Microsoft's Partners in Learning, and has shaped how Microsoft thinks and works with educators in pedagogy, content expertise, and technology. Additionally, our work with the Teachers Education Initiative (TEI) benefit from the substantial contributions and participation of TPAC and Dr. Punya Mishra. We have long held that technology is simply a tool that when used appropriately in educational contexts it can help improve teaching and learning. However, technology is only one piece of a larger approach supported by professional development, content support, and instructional technology training.

Our approach is also in alignment with the SAMR model advanced by Ruben R. Puentedura, Ph.D. Indeed, our proposed academic platform is powerful, feature rich, easy to use, and flexible. The proposed tools support the creation of new, redefined and transformative tasks, workflows that are not yet imagined. Moreover, our tools provide ability to publish and share high quality content and enable unexpected instructional efficiencies.

In conjunction with education experts from around the world, we explore new approaches and resources that any school or school system can use, and the critical teacher and instructional leadership development necessary, to help students achieve their full potential. Microsoft also works with educators and industry leaders around the world to transform and optimize technology implementation. In addition, Microsoft has developed and published Infrastructure Optimization models designed to evolve infrastructure, increase productivity, and transform the technology environment (http://www.microsoft.com/optimization/leftNav/overview.mspx).

In support of Innovative Teaching and Learning Research, we work with education and political leaders in countries around the world who recognize the imperative to prepare their youth for the 21st Century. Microsoft proudly sponsors of the Innovative Teaching and Learning (ITL) Research project. This ambitious initiative aims to provide education policy evidence on what achieves results for students when integrating technology into teaching and learning. Microsoft is dedicated to education excellence and demonstrates this commitment in many ways, and partners with global and local education leaders, such as UNESCO.

Likewise, HP supports innovative research to STEM instruction through its Catalyst Grant program. With consortia globally working in teams across secondary and tertiary institutions, educators are developing new methodology for professional development, assessment and models for STEM instruction.

Microsoft's compliant academic platform proposes software that provides students and teacher with feature rich software capabilities. With a focus on supporting teachers and students, Microsoft proposes technologies such as Microsoft Office 365 for Education, Microsoft Office, Windows 7 or 8, Internet Explorer, and optional academic and productivity tools that facilitate education functions and support students and teachers. Our solution supports the Common Core State Standards, their outcomes and education needs in:

- Writing
- Reading

- Data Analysis
- Computational Thinking
- Presentations and Publishing
- Multimedia Creation
- Research
- Communication and Collaboration

In alignment with the models adopted, Microsoft supports Innovative Educator workshops designed to educate trainers and teachers on instructional best practices using technology. These workshops integrate the tools proposed as part of our Microsoft Innovative Educator workshops. Microsoft also offers online courses, materials, resources and provides easy to understand help files and on-line training materials. Moreover, additional information regarding the training content for Microsoft Office can be found at http://office.microsoft.com/en-us/help/training-FX101782702.aspx

Table 1. The Proposed Microsoft Academic Platform Supporting Education Needs Includes:

Microsoft Office	Office 365 for Education	Windows 7 or 8 & Internet Explorer	Additional & Optional Apps
•Access •Word •Excel •Lync •PowerPoint •Publisher •Outlook •OneNote	**Cloud-based** professional email Video conferencing and IM **Web-based viewing and editing** using Office Web Apps Share files inside and outside school **Secure Student and Teacher Data** Your data belongs to you – Microsoft does not scan emails or documents for advertising purposes. Compliant with Industry Standards & leadership in transparency.	Supporting students and teachers with desktop power using tablet form factors. Beautiful, fast, and fluid experience that you can personalize with the people, applications, and sites you need. Accessibility, Security and Privacy Features. Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	IT Academy-Supporting CTE Standards Education, Publisher and Content Provider Apps (such as those from Windows Store) Office Store and Apps Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0-step by step graphing calculator supporting mathematics and science standards. Optional scientific tools from Microsoft Research.

Table 2. In addition to our support of MLTI's adopted models, Microsoft has provided a summary of our tools supporting the functional needs identified in this section. Also, we have provided examples of envisioned use as requested.

Summary Compliant & Relevant Tools	Envisioned Use Examples
Access 2013 Basic and Advanced Database, Reporting, Design	Supporting CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels. Supports data analysis and modeling; Develop advanced data models, support analysis, capture data, develop reports, conduct analysis, Support computational thinking and informational management; synthesized knowledge and creativity with database functionality
Excel 2013 Basic and Advanced High Quality Computation, Analysis, Modeling, Spreadsheet, Collaboration, Communication	Supporting Mathematics CCSS, NGSS (Science) and ELA standards, & individual state requirements, Develop and conduct fundamental and advanced data analysis; develop rich data visualizations; recognize patterns and support computational thinking with charts and real time data from websites. Support mathematics and science concepts using real world tools used by researchers and employers; supporting computational thinking activities, such as incorporating data, visualizations, and charts, support research and develop data to demonstrate evidence based & research texts; Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.
IT Academy, DreamSpark, Career Forward, Kodu	Supporting Mathematics CCSS, NGSS (Science) and ELA standards, & individual state requirements, Engage computational thinking, data analysis, writing, reading, data analysis, modeling, presentations, multimedia creation using IT Academy. Comprehensive CTE offering supporting technology readiness and certification initiatives with real world tools used by employers; e-learning & teacher resources, curriculum, & software. Students develop projects with ITA learning and take certification exams providing them with industry recognized certifications/credentials in addition to a high school diploma. Easy to use visual programing language for K-5 students using Kodu as an alternative assessment, students develop game-based projects employing computational thinking supporting nontechnical, academic subjects- play using Xbox
Lync IM/Audio/Video Chat/Desktop Sharing/Polls/ Online Whiteboards	Supporting Mathematics CCSS, NGSS (Science) and ELA standards, & individual state requirements, Enables synchronous, online collaboration, sharing, desktop and document sharing, recording online meetings for video playback, presence awareness, supporting text based communication with individuals and groups; individual, group and class distance learning, interview industry experts, invite students to work on Flipped Classroom activities after school, integrates with Microsoft Office Word, PowerPoint, Excel, OneNote and Outlook.

Summary Compliant & Relevant Tools	Envisioned Use Examples
Microsoft Math 4.0 Basic and Advanced Mathematics Graphic Calculator, step by step equation solver	Supporting Mathematics CCSS ELA and NGSS (Science) standards, individual state requirements, step by step problem solving, develop high quality 3D and 2D graphs, Supporting computational thinking, Support formula and triangle equations, support remediation of mathematics, support computational thinking and data analysis.
Office 365 for Education Cloud-based, Secure Communication & Collaboration, Productivity, Office Web Apps	Supporting Mathematics CCSS ELA and NGSS (Science) standards, individual state requirements, Online Cloud storage, email store, IM/Audio/Video communications; Office Web Apps; interactive distance learning, research and engagement with other cultures on line, video/audio, support learning needs across academic content areas and throughout desired grade levels.
OneNote 2013 Easy to Use Flexible Digital Notebook	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels; Capture video notes, audio notes, handwritten notes, record performances, speaking, narration, listening activities, develop writing examples, share & coauthor notes, capture digital inked notes, Review synchronized audio/video and notes.
Optional/ Additional 3rd party applications Available at the Windows and Office Store & Side Loaded Apps	Capable of supporting multiple CCSS and individual standards. Additionally, no cost and low cost third party applications are also available to provide optional, added support for this requirement if desired. Add applications for Windows and Office to extend and customize; Add consumer, education and third party applications supporting possibilities for existing and new instructional tasks and workflows; Internet Explorer 10 Add-in support third party website capabilities; access publisher content, develop videos with MovieMaker, manipulate digital images using Photo Gallery; Use PhotoSynth to create panoramas and 3D photo environments; Interactive Classroom used for real time polling/interactivity with K-6 students
Outlook 2013 Definitive email, Message & Calendars	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels. Enables asynchronous communications; Manage email, calendars for student meetings; collaborate with teachers, students and researchers. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.

Summary Compliant & Relevant Tools	Envisioned Use Examples
PowerPoint 2013 Basic and Advanced High Quality, Interactive, multimedia Authoring, Collaboration, Communication, Personal Tablet, In Person, On Line Presentations	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels. Develop audience, on line, and individual interactive multimedia texts and presentations, edit video and photos inside PowerPoint, Save to HD video, collaborate and coauthor with students, researchers, and distant experts , presentations and publishing, present findings with appropriate language, vocabulary supporting listening and language activities. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.
Publisher 2013 Basic and Advanced Content Publishing, Simplified Site Design, Creative Design	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels. Supporting student presentations and publishing; Supporting writing; Publisher allows students to transform text into fine typography projects for the screen or in print. Students use stylistic sets, and can use new Text Effects, Picture Effects, and even print out photos if needed using new Photo Center Printing.
Windows & IE Fluid, Fast Operating System supporting Touch, Keyboard, Mouse, with Access to sites students and teachers need.	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels. Provides touch capabilities, digital ink, equation input with digital ink, handwriting input with digital ink; touch screen keyboard, accessibility, speaking/narration, speech recognition, built in snipping tool, calculator, Access publisher, content developer and education related content. Add applications for Windows and Office to extend and customize. Add consumer and third party applications and supporting possibilities for existing and new instructional tasks and workflows. Internet Explorer supports information management, research, website browsing, streaming, safety and security
Windows Live Movie Maker & Photo Gallery Digital image and movie creation and editing	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/ content areas and grade levels. Powerful, simple digital photo editing, import, edit and share digital photos. Quick, Fast movie creation, edit clips, audio, add effects, and share movies. Support creative and instructionally related digital images and movies for use in presentations and supporting textual evidence. Visually and audibly represent abstract and concrete, concepts; Incorporate across disciplines and content areas and grade levels.

Summary Compliant & Relevant Tools	Envisioned Use Examples
Word 2013 Fundamental & Advanced High Quality Authoring, Text Development, Word Processing, Collaboration, Communication, Reading	Supporting ELA CCSS, Mathematics and Science CCSS, individual state requirements, multiple language support; built in translation tool, research tool, search tools, View texts and video playback inside Word. Co-author in real time; Open PDF files, edit and save. Edit photos inside Word, Search for Online video and photos inside Word, Receive Readability Statistics, and interactive grammatical and spelling feedback. Communicate research findings; Create literary, creative, technical, informational, research and other texts; Document findings, conclusions, and document synthesized knowledge and concepts; Manage citations, references, and generate Works Cited and Bibliography pages. Use during presentations and publishing supporting listening, language and communications tasks; Create high quality, evolve and elaborate text; read informational and literary texts. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.

Microsoft's proposed platform supports students and teachers and facilitates education needs and The Common Core Standards, individual state standards and their outcomes. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins. We have provided a table in section 6.7.1 Optional Software for reference that depicts a summary of tools, functionality, requirements. Additionally, we have provided examples of anticipated student uses with our solution. We expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

Microsoft Education Teaching & Learning Matrix

A Checkmark Symbol (✓) Indicates Technology Supporting the Requirements

Compliant Microsoft Academic Platform Tools	Functionality	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Access	PowerFul Database for rapid design, creation, Create Custom Web App, Data analysis, Organizing data, Custom Web App, Desktop Database, Templates, Development fundamentals, Simulations, Programming, Forms, Reporting			✓	✓			✓		✓
Excel	Industry Leading Feature Rich Spreadsheet, Data analysis, Slicer, TimeLine, Pivot Chart, Power View, Image Search, Digital Photo manipulation, Advanced Data visualization,2D, 3D charting, real time website data analysis, real time collaboration, integrated digital image manipulation, concept mapping with Smart Art, 3-D charting and with spreadsheet capabilities integrated Lync, SharePoint, SkyDrive, and other social networking sites, Apps for Office			✓	✓		✓	✓		✓
OneNote	Powerful note taking, developing text, reading response, journaling, research, data recording, capture audio and video notes, audio/video note playback, capture screenshot url, date, time website names, multiple notebooks, search across all notes, tagging, equation editing, ink, capture hand written notes and search handwriting, ink diagrams, graphical idea mapping, integrated Lync, SharePoint, SkyDrive, and other social networking sites	✓	✓	✓	✓	✓	✓	✓	✓	✓
Outlook	Touch enabled communications, collaboration and productivity tool, manage file, email, meetings, web meetings, manage resources, Presence awareness, easily set up Lync web conferences, and meetings, publish schedule to internet sites, access Outlook on your phone, tablet or device, Social networking capabilities with Linked In and Facebook	✓	✓	✓		✓		✓	✓	✓

Microsoft Education Teaching & Learning Matrix

A Checkmark Symbol (✓) Indicates Technology Supporting the Requirements

Compliant Microsoft Academic Platform Tools	Functionality	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PowerPoint	Prolific presentation creation, text development, Supporting academic and scholarly presentations, slide presentations, development of multimedia & interactive content, publishing content to SharePoint sites for review, collaboration, versioning, presentations, touch enabled, advanced presentation view, reading view, include audio, video, coauthor and collaborate in real time, access & edit content using browser, save as presentation as HD video and other formats, PowerPoint Show, Integrated Digital photo manipulation, with Windows 8 Pro, search and insert video from internet sources, video manipulation, Represent complex ideas with SmartArt, Insert Charts, spreadsheets, Create interactive content with Actions, Apps for Office Animations, new engaging transitions powered by Windows 8	✓	✓	✓		✓	✓	✓	✓	✓
Publisher	Create & Publish high quality, Building Blocks library, Visually rich content, Creating picture backgrounds, Picture Effects, Text Effects, Photo Center Printer, Export as HTML, Single Web Page, pub and other formats, Templates	✓	✓			✓	✓			
Word	The leading word processing tool, Writing authoring, editing, manage citations, Generate a Works Cited or Bibliography page quickly, Improved Reading View for tablets, touch enabled, Integrated digital image manipulation, Apps for Office, Readability statistic, spelling and grammar check, Charts, Represent Complex ideas or use as graphic organizer with SmartArt, Templates	✓	✓	✓	✓	✓	✓	✓	✓	✓

Microsoft Education Teaching & Learning Matrix

A Checkmark Symbol (✓) Indicates Technology Supporting the Requirements

Compliant Microsoft Academic Platform Tools	Functionality	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lync	Powerful, easy to use collaboration and communication. IM, Web Conferencing, Desktop Sharing, Polling, share desktop, White Board, Presence Awareness, Communications, and integration with Microsoft Office. Available on phone, tablet or traditional form factor	✓	✓	✓	✓	✓	✓	✓	✓	✓
M5 for Education	Umbrella for productivity tools on line and with students & teachers. Sites, blogs	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internet Explore	Modern browser built using Trustworthy Computing: Security and Privacy, Acceleration, Add ons, Flip Ahead, HTML5 Embraces Industry Standards	✓	✓	✓	✓	✓	✓	✓	✓	✓
Windows	Innovative Operating System providing full operating system experience for users on tablets and computers with traditional form factors. Delivers safety, security, user experience, accessibility and additional features like Screen Clipping Tool, Steps Recorder, Audio Recorder	✓	✓	✓	✓	✓	✓	✓	✓	✓

A Checkmark Symbol (✓) Indicates Technology Supporting the Requirements

Compliant Microsoft Academic Platform Tools	Functionality	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OPTIONAL: NO FEE TOOLS										
Microsoft Math 4.0	Add in for PowerPoint & Windows 8 pro, Graphing calculator, plots in 2D and 3D, step-by-step equation solving, triangle solver, formula resources			✓	✓					
Interactive Classroom	This PowerPoint and Chalkzie add-in, real time interaction, insert customized classroom polls (multiple choice, yes/no, or true/false) and notes into your presentations	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kodu	•High-level language incorporates real-world primitives: collision, color, vision•High-level language incorporates real-world primitives: collision, color, vision •Uses Xbox 360 Game Controller for input — no keyboard required •Runs on Xbox 360 and PC •Interactive terrain editor •Bridge and path builder •Terrain editor - create worlds of arbitrary shape and size •20 different characters with different abilities				✓					
DreamSpark	As a Student: simply create an account, verify your student status and download software through this website at no cost			✓	✓		✓	✓		
Photosynth	Photosynth offers two styles for creating immersive 3D experiences: using panoramas or synths						✓			

Microsoft Education Teaching & Learning Matrix

A Checkmark Symbol (✓) Indicates Technology Supporting the Requirements

Compliant Microsoft Academic Platform Tools	Functionality	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Windows Live Movie Maker	Special effects, Themes, Movie Editing, Incorporate Digital Photos, Auto movie, Import and edit slide shows and videos, Edit the soundtrack and add a theme					✓	✓			
Windows Live Photo Gallery	Create panorama, Merge digital images with Photo Fuse, Import Photos/Videos Organize Edit, and share digital images online					✓	✓			
Optional Apps for Office										
No Cost Apps at Office Store for Excel (Please note that the free apps in our Store are representative [illegible]	Supporting features like Geographic Heat Mapping, Radial Charting, Model creator for Excel, Bing App, Random Generator Add Additional Apps appearing frequently http://office.microsoft.com/en-us/store/apps	✓	✓	✓	✓	✓		✓	✓	

Microsoft Education Teaching & Learning Matrix

A Checkmark Symbol (✓) Indicates Technology Supporting the Requirements

Compliant Microsoft Academic Platform Tools	Functionality	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
No Cost Apps at Office Store for Word (Please note that the free apps in our Store are representative and could change without prior notice due to the proprietary licensing. Please see the Office Store for a list of available apps and the each Third Party Terms and Conditions) Please see our Office Store for the latest free and for the free apps available http://office.microsoft.com/en-us/store/	Word Cloud app for Student Generated Texts in Word, Expression Solver, Bing Dictionary, Flowcharts, Mapping, New Word each Day	*	*	*	*	*	*	*	*	*

* Third party apps may provide additional or enhanced functionalities in support of education needs

Upon award, Microsoft and HP will work with the State(s) to further refine and align technologies to the Common Core State Standards and Individual State Standards and will offer additional guidance regarding our tools as this process and standards evolve.

6.6.1.2. Reading (e.g., annotating, excerpting, sharing, determining complexity, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.3. Data analysis and modeling (e.g., spreadsheet, graphing and charting, GIS, predict and explain, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.4. Computational thinking (e.g., analyzing and organizing data, data modeling and simulations, programming, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.5. Presentations and publishing (e.g., slide shows, web authoring, speaking/narrating text, providing feedback, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.6. Multimedia creation (e.g., creation and manipulation of digital images, audio, video, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.7. Information management (e.g., database, concept mapping, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.8. Research (e.g., Internet browsing with the ability to access and utilize common multimedia and interactive content like streaming audio/video, javascripting, java applets, HTML5, Flash, etc.).

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

6.6.1.9. Communication and collaboration (e.g. sharing data, asynchronous and synchronous text-based communications, video/audio chat, etc.)

Response:

The overview of HP's recommended software environment is provided in Section 6.6.1.1.

The Bidder must describe the applications included in its solution including how it envisions those tools supporting the functional needs described in this section.

Response:

The overview of HP's recommended software environment including how it envisions these tools supporting the functions supplied is provided in Section 6.6.1.1.

6.6.2. Multi-State Standards

6.6.2.1. Common Core State Standards for English Language Arts

Forty-six States have adopted the Common *Core State Standards for English Language Arts*. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support the teaching of and the learning of the outcomes described by the *Common Core State Standards for English Language Arts* including the 4 component sections: reading, writing, speaking and listening, and language. Bidders should pay particular attention how the solution provides tools and functionality to support text complexity, informational text, and text types as described in the CCSS for ELA (http://www.maine.gov/education/lres/ela/standards.html).

Response:

HP/Microsoft's compliant academic platform proposes software provides students and teacher with software tools that facilitates the education functions required and supports the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects. With a focus on supporting teachers and students, Microsoft proposes technologies such as Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer, and optional academic and productivity tools that facilitate education functions and support students and teachers.

Description of Tools

Educators around the world use Microsoft tools because of their flexibility, features, and capacity for to produce vibrant, high quality content and text development. Over the past decade, innovation throughout the Microsoft Office family has resulted in powerful and flexible technologies that set the standard for productivity tools. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences.

We have provided examples tools and functionality and examples of anticipated academic use with our solution for the English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects Common Core Standards. Because of the power and flexibility of our proposed academic platform, we expect that the use and academic application of these tools will evolve over time and enable transformational education workflows.

Microsoft provides description of the tools and functionalities included in our proposed, compliant academic platform, supporting the teaching of and the learning of the outcomes described by the Common Core State Standards for English Language Arts including the four strands: reading, writing, speaking and listening, and language.

In addition, we have provided a description of tool functionality to support text complexity, informational text, and text types as described.

Table 3. Descriptive Tools Summary- Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
Feature Rich Productivity Tools on Tablets • Word • Lync • PowerPoint • Publisher • Outlook • OneNote Supporting technologies for Science and Technical Subjects • Access • Excel	*Cloud based Tools* Video conferencing & IM; Word, Excel, PowerPoint, OneNote and Outlook Office Web Apps for web-based viewing and editing, professional email, share files inside and outside school Your data belongs to you – Microsoft does not scan emails or documents for advertising purposes. Compliant with Industry Standards & leadership in transparency Secure Student and Teacher Data.	*Desktop Capabilities on Tablet form factors* Windows supports students and teachers with desktop power using tablet form factors. Accessibility, Security and Privacy Features. Beautiful, fast, and fluid experience that students can personalize with the people, applications, and sites they need. Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	*Education, Publisher and other Education Apps* Apps from Windows and Office Stores Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0- step by step graphing calculator supporting mathematics and science standards. Optional scientific tools from Microsoft Research IT Academy- Supporting CTE Standards

Table 4. HP/Microsoft propose technology that supports the Common Core State Standards in English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Standards (By Strand)	Key Feature of Standards	Functionality and Examples
Reading	Text complexity and the growth of comprehension	Word's Read Mode used to enable reading of text, excerpts of seminal works, annotation of texts using digital ink, highlighting and commenting, narrator, SmartArt graphic organizer for rereading; Search, Research, and Translation Tool support phonics and word recognition, Use OneNote to share curated texts for student groups; conduct online reading activities using Lync's desktop sharing; predict using polling online; record online meetings; play back video; OneNote has audio and video notes and can capture and recognize digital ink in handwriting notes. View text using 3rd party text readers and publishing applications.
Writing	Text types, responding to reading, and research	Get readability and grade level writing feedback from built in tools inside Word. Get grammatical and spelling feedback inside Office. Develop very high quality, complex informative and explanatory texts with illustrations in Word; edit digital images inside Word; present to class using multimedia and interactive features in PowerPoint. Generate engaging and creative works using Publisher. Share student writing examples using OneNote. Support Writing portfolio using OneNote. Develop quality research texts using multiple sources easily cite and manage sources, efficiently generate Works Cited or Bibliography page using built in tools in Word. Use APA, MLA, Chicago, ISO and other academic styles in writing. Conduct peer editing online, coauthor content and collaborate in Word. Share content using optional social media integration, email, or online using Video or desktop sharing. Publish writing using keyboard skills, using handwriting, using speech recognition built into Windows and integrated in Word, and other Office tools.
Speaking and Listening	Flexible communication and collaboration	Present effectively and develop high quality presentation materials using PowerPoint; Use media strategically, and use assorted media such as SmartArt, video, audio and other object in text. Demonstrate command of the English language capturing presentations using OneNote. Evaluate speaker's point

Standards (By Strand)	Key Feature of Standards	Functionality and Examples
		of view using video capture and synchronized notes in OneNote. Paraphrase text aloud and record it using applications in Windows. Develop creative presentations and save as a HD movie in PowerPoint. Edit video, audio using Apps in Windows. Make strategic use of media in presentations using Word, PowerPoint, or Publisher.
Language	Conventions, effective use, and vocabulary	Support sentence level context using search and research tools in Word, use online reference materials with IE, or built in Word features.

Reading

By supporting robust technologies that embrace industry standards, and supporting third party education applications, Microsoft provides fundamental and advanced technology features. Since Windows is a full operating system, students, and teachers are able to take advantage of powerful, feature rich content creation and productivity tools on their tablets. Students and teachers can work with diverse content and education sources using tools like IE, which provides compelling web experiences and supports sites using third party technologies, such as those using Adobe Flash and other supported browser add-ons.

Additionally, students and teachers can use third party applications (such as eReaders or interactive publishing content) exposing students to a variety of literary, informational texts from publishers and content creators (e.g., Kindle, KNO, NOOK) and other education, consumer and commercial applications, using their Windows device.

Additionally, Microsoft Word provides an engaging reading experience using the Read Mode and is able to open a diverse set of file types. Our tools promote new education tasks and workflows with rich functionality. As an example, students can open and read education text and content contained in a PDF. Using Word, they can also annotate within the file. In this example, the changes can then be saved while in Word.

- Engage in Reading Literary and Informational Texts- Using Word, students gain exposure to a range of texts and tasks. Students are able to get absorbed in texts with the new clean, comfortable reading view.
- Annotate Reading and Writing Texts- Students can annotate content in Word. Users can also open PDF files, make annotated comments, and save as a PDF or other format.

- New Read Mode- Users can engage with informational and literary text using Microsoft Word's new Read Mode. Using the view, editing tools are removed to minimize distractions, but users still have access to the tools that are always handy for reading such as Define, Translate, and Search on Web. These tools can support students as they learn how to clarify the meaning of unknown and multiple-meaning words and phrases a context clues, analyze meaningful word parts, and consult general and specialized reference materials.
- Object zoom- Double-tap with your finger or double-click with your mouse to zoom in and make tables, charts, and images in your document fill the screen. Focus on and take in the information, then tap or click again outside the object to zoom out and continue reading.
- Resume reading- Reopen a document and keep reading right where you left off. Word remembers where readers were, even when the user reopens an online document from a different computer. Online video- Students watch online videos right in Word, without having to leave the document, so they can stay focused on the content.
- Expand and collapse- Collapse or expand parts of a document with just a tap or click. Put summaries in headings and leave it to readers to open the section and read the details if they want.

Writing

Students and teachers can use Microsoft's tools to develop fundamental and advanced writing content. Microsoft Word's flexibility and functionality supports the required writing instructional needs, such as authoring required text types, content development, and text complexity. Students are able to develop their text around the standard text types, including narrative writing texts, creative writing-beyond narrative, informational/explanatory texts, and employ argument and persuasion. Students may prefer Word to develop their texts, although Microsoft Office does not require a specific application to create student writing. However, Word has evolved with this purpose in mind. Publisher also provides support for diverse writing tasks and like Microsoft Word, contains numerous templates that assist students as they create creative writing projects. Of note, Publisher allows students to publish high quality content as HTML and author basic webpages, in addition to flyers, bookmarks, and other creative projects.

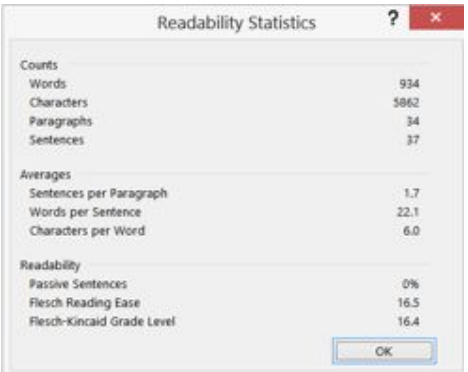
Microsoft Word provides the ability to plan, revise, edit, and publish text and supports academic workflows requiring a writing process, and provides flexibility for students as they develop content across instructional disciplines. A formalized writing process is not required when authoring content or collaborating in Word. Additionally, real time group coauthoring and collaboration is supported in Word, and using Excel, PowerPoint, OneNote. In addition, students and teachers can collaborate using video/audio, IM, and email as well with these tools.

Students may take advantage of Word's outline capabilities to help structure their work, or use a customized template as a guide. Additionally, the use of a graphic organization tool during the writing process may be helpful as the student refines purpose and develops text complexity. Students can use the built in SmartArt graphics as part of a prewriting strategy as needed or indicated during instruction. Word has the ability to incorporate digital ink, support equation writing, capturing video, photos, voice recordings, SmartArt, and additional objects, which also facilitates rich content development opportunities.

Students can customize their experiences in Office. Students can use custom templates and customizing commands on the Office Ribbon and Quick Access Toolbar. Students are able to create their own personalized tabs on the Ribbon and create an environment that works best for their particular needs. Using Microsoft's proposed platform, students can save their work to the cloud, share their work with other students as part of a collaborative activity, and work together at the same time or asynchronously. Students are able to use the integrated communications capabilities, and can view presence for group members, set up a video and web chat sessions, IM, coauthor, share documents and their desktop, and peer edit in real-time.

Students can develop independent content or write in groups. Microsoft Office allows teachers and students to engage in real time communication and collaboration. These features support academic scenarios such collaborative group writing and research projects. Additionally, the Microsoft Office collaboration and communication features support student mentors and student experts coaching other students.

Real-time proofing feedback illuminates potential spelling and grammatical errors for students. This capability provides additional support for numerous languages. Students can gain additional insight into the readability of their writing and get an indication if they are writing on grade level. Indeed, writing on grade level and developing grade appropriate texts are essential and teachers play a key role supporting students as they develop their writing skills on grade level.



To support this aim, students receive feedback very quickly regarding spelling, grammar and readability using Word's built in Proofing Tools. Moreover, students are able to get an indication if they are writing on grade level, using the Review tab in Microsoft Word, Spelling, and Grammar option. Optionally enabled, After Word reviews spelling and grammar, readability insight is displayed using the Flesch Reading Ease and Flesch-Kincade Grade Level. With their domain expertise, teachers can use this feature another indicator when assessing the student's grade level writing progress.

Complementing scholarly research and supporting academic integrity, Word provides students with built in capabilities so that they easily collect, manage and cite references. Indeed, it is important for students to understand when and how to give credit and recognize sources and the process for citing sources should be supported by the technology. Word allows students to easily and efficiently manage and document research.

Importantly, fundamental, repetitive tasks should be handled by the technology, freeing instructional time for the student and teacher. As an example, if students are working on a research paper, Word performs routine tasks such as assisting students as they manage sources, references, and document citations. Students easily generate a Works Cited or Bibliography page using an appropriate academic style (e.g., APA, MLA, ISO) in Word.

Additionally this capability can be called out by educators and can be used as part of an effort to promote ethical and responsible academic citizenship and appropriate scholarly documentation in support of learning outcomes, academic goals, and the CCSS and individual standards.

Microsoft Office supports student-learning tasks such as providing tools to coauthor to supporting the use of media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task. Even though students are working on their portable computing devices and saving to the cloud, there is no need to spend extra time instructional time reworking or reformatting content resulting from saving to the cloud. Formatting is preserved throughout the round trip of a document. Students can use their time to focus on important instructional activities and refine their digital manuscripts, presentations, notes, models and projects without reformatting misplaced content resulting from a file that has traveled round trip in the cloud.

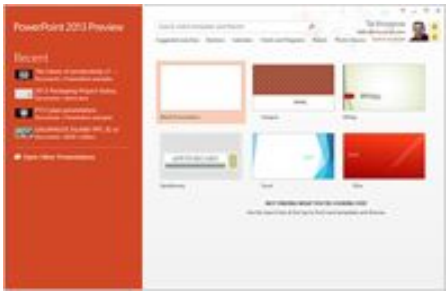
Speaking and Listening

Microsoft also supports Speaking and Listening using multiple tools. In addition to Windows applications, Internet Explorer 10 provides access to streaming sites. PowerPoint supports group and individual presentations in person or online. PowerPoint allows students to engage effectively in a wide range of collaborative discussions and present on diverse topics, texts, and issues, allowing students to build on others' ideas and expressing their own ideas clearly. Furthermore, PowerPoint supports collegial discussions and collaboration using the integrated communications features found in Microsoft Office, such as conducting online presentations to individuals and groups.

In addition to standard text and graphics, Microsoft PowerPoint has the ability to incorporate digital ink, support equation writing, incorporate video, photos, voice recordings, music SmartArt, and additional objects. Additionally, they are able to include multimedia elements as part of their work. Students may want to record and play back group activities and student presentations in support of their speaking and listening tasks.

Similarly, OneNote supports Speaking and Listening standards and outcomes by recording the video and audio during a note taking session. The notes are automatically indexed with video and audio recording. Upon playback, the captured notes are highlighted in sync the video playback. OneNote can support feedback with individuals and group presentations and activities.

PowerPoint allows students to adapt content and their presentations using a variety of contexts and tasks. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. Mathematics courses can use PowerPoint as a supplemental tool to develop student projects representing mathematics domains, clusters, or standards. PowerPoint 2013 and Windows enable students and teachers to insert equations into presentations and use the equation gallery



PowerPoint helps students integrate multiple sources of information supporting diverse media and formats. In addition, students are able to use PowerPoint as they present information, findings, and support their evidence clearly, concisely, and logically.

Students are able to make strategic use of digital media ranging from textual, graphical, audio, visual, and interactive elements into presentations that enhance understanding of student or group findings, and reasoning.

Students are able to incorporate qualitative data using a variety of features, such as slides incorporating text boxes, graphics, art, and digital images. This includes features that allow students to create a visual representation of abstract and complex ideas and information using SmartArt. While inside PowerPoint, students can search for online pictures and online video without leaving the app. Students have the ability to manipulate and edit digital photos and video inside PowerPoint and save their presentations as HD Video.

PowerPoint is a familiar and prolific tool and traditionally used when communicating and presenting information with audiences in a variety of physical locations, such as in a classroom or auditorium. PowerPoint continues to support group presentations. Important to understand are new uses of PowerPoint that are now possible. Because of collaborative and communications integration, PowerPoint is useful for numerous online presentation scenarios. Students can present to other students online, work on virtual group projects, and participate in peer coaching. Teachers can share student work, hold parent teacher meetings online, and present to colleagues online.

However, Windows and PowerPoint now provide the capability to deliver more personal, interactive multimedia experiences. As an example, digital storytelling can now incorporate interactive, touch-enabled content authored and viewed in PowerPoint. Students can flip through instructional content using touch, which can incorporate embedded files and online video resources. Given the ubiquitous teacher instructional content authored in PowerPoint, teachers have the potential of transforming their existing presentations and develop interactive resources that use touch. Also, students are able to engage and participate in a range of collaborative discussions using the communications tools in Microsoft Office as well. IM, Voice/Audio, and email are among the supporting options to support speaking and listening.

Language

Microsoft's platform supports the conventions, knowledge of language, and vocabulary extend across reading, writing, speaking, and listening and is facilitated by Windows, Word, PowerPoint, Publisher, OneNote, Internet Explorer and Windows. In Word the grammar and spelling checks combined with readability statistics provide support and flexibility with the language component.

In Microsoft Word, students receive feedback in real-time regarding spelling, grammar and can check the text's readability. Moreover, students are able to get an indication if they are writing on grade level, using the Review tab in Microsoft Word, Spelling, and Grammar option. Text can also read using the narrator and recordings can also be embedded in Word documents. Video content can also be inserted and viewed while in PowerPoint and Word.

Students and teachers are able to use recording capabilities to support replay of language activities to reinforce key concepts. As Microsoft OneNote enables on line and off line note taking, journaling, and it can be used during the prewriting process to incorporate learned patterns, conventions of Standard English, appropriate vocabulary and support the language progressive skills as part of a student portfolio.

Supporting Reading, Writing, Language, Speaking, and Listening across Content Areas

Microsoft OneNote supports academic standards and education outcomes across disciplines and tasks, such as writing, reading, mathematics, science, history, CTE, and elective courses. Students may use OneNote across content areas and grade levels, and use OneNote to compile and organize unstructured information, research, and content. OneNote also supports research, collaboration, information management, communication, note taking, journaling, reflective writing, and the requirements contained in this proposal. Because of its flexibility, OneNote possesses the capacity to support envisioned and yet to be envisioned activities, tasks, and academic workflows and is part of our proposed, compliant academic platform.

Microsoft OneNote is a digital notebook that provides a single place for student or teacher notes and captured ideas, with powerful search that allows students to needed content quickly, and easy-to-use shared notebooks to manage data collection and work together with others more effectively.

Unlike paper-based systems, word processing programs, e-mail systems, or other productivity programs, OneNote delivers the flexibility to gather and organize text, pictures, digital handwriting, audio and video recordings, and more — all in one digital notebook. The Notebook is available locally for off line access and can be synced to the cloud and shared with others as part of collaborative study or supporting existing and new group scholarly research workflows.

Individual students and groups can use OneNote's audio and video notes to capture group performances and activities. Students can provide feedback in OneNote during the recording and upon playback the notes are synchronized and highlighted.

OneNote helps students stay productive by keeping the information easily searchable, reducing time spent searching for information across e-mail messages, paper notebooks, file folders, and printouts. Students can print to OneNote, meaning that OneNote can collect digital printouts of students work, writing, texts, reading, and other projects and support digital student portfolio initiatives. Teachers can use OneNote to support their Open Educator Resources and share instructional content with students.

Students can send content into OneNote and find the content for use using built in search. OneNote also allows content to be tagged and can be used as a personal wiki. Students can collect research and use OneNote as a repository for their research. As an example, students can work together in groups and collect research from the needed website. Students collect needed research from sites using screen clippings. In addition, text captured within the screen-clipping image becomes discoverable through search, and the content can be further used in support of needed research and academic assignments and tasks. When students add screen clippings to the OneNote page, the site's name, URL, date, and time are also captured and available for use in citations.

OneNote is an integrated part of Microsoft Office, which makes it easy to gather, organize, find, and share your notes and information more efficiently and effectively. Powerful search capabilities can help you locate information from text within pictures or from spoken words in audio and video recordings. Furthermore, OneNote's easy-to-use collaborative tools help student teams work together using shared notebooks, and can later access their content whether online or offline.

With all of your information at your fingertips, OneNote provides you a solution for information overload, enables you to work with others more effectively, and helps you stay on top of tasks, schedules, and team information. The familiar look and feel of the Microsoft Office system makes it easy to start using the program right away, minimizing wasted time, and training costs.

We have provided an appendix providing additional descriptions and functionality in the section 6.6.1.1.

6.6.2.2. Common Core State Standards for Mathematics

Forty-six States have adopted the *Common Core State Standards for Mathematics*. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support the teaching of and learning of the outcomes described by the *Common Core State Standards for Mathematics* with a particular emphasis on the eight "Standards for Mathematical Practice" as detailed in Common Core State Standards for Mathematics (http://maine.gov/education/lres/math/standards.html#ccss-math).

Additionally, the solution must include the capacity to format and display mathematical formulas, equations, and symbols. Entry and editing of mathematical formulas, equations, and symbols should be easy and allow for teachers and students to create documents and media that aid with instruction and learning.

Response:

Microsoft's proposed platform supports students and teachers and facilitates education needs and The Common Core Standards for Mathematics, and also supports individual state standards and their outcomes as well. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences. As a benefit, students will be able to advance their academic and practical grasp of mathematics using the same tools used by science and business communities, as they solve real world problems. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins.

The Microsoft proposed tools have the ability to easily format and display mathematical formulas, equations, and symbols and support mathematics instruction workflows and tasks related to computational thinking, data analysis and modeling, information management, reading, writing, and presentations, with integrated capabilities for communication and collaboration.

Table 5. Microsoft has provided an overview of the Common Core State Standards for Mathematics with an emphasis on the eight standards for mathematical practices.

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
Feature Rich Productivity Tools on Tablets •Excel •Access •OneNote •Word •Lync •Outlook •PowerPoint •Publisher	*Cloud-based Tools* Video conferencing & IM; Word, Excel, PowerPoint, OneNote and Outlook Office Web Apps for web-based viewing and editing, professional email, share files inside and outside school Your data belongs to you – Microsoft does not scan emails or documents for advertising purposes. Compliant with Industry Standards & leadership in transparency Secure Student and Teacher Data.	*Desktop Capabilities on Tablet form factors* Windows supports students and teachers with desktop power using tablet form factors. Accessibility, Security and Privacy Features. Beautiful, fast, and fluid experience that students can personalize with the people, applications, and sites they need. Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	*Education, Publisher and other Education Apps* Apps from Windows and Office Stores Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0-step by step graphing calculator supporting mathematics and science standards. Optional scientific tools from Microsoft Research IT Academy-Supporting CTE Standards

Additionally, we have provided examples of anticipated student uses with our solution. While using our tools in mathematics courses, we expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

Table 6. Examples of anticipated student uses with our solution.

Common Core State Standards for Mathematical Practice	Examples of Use and Functionality
Make sense of problems and persevere in solving	Use Microsoft Math 4.0 to reinforce challenging math problems, from simple to advanced, providing step by step guidance; students tutor and mentor peers using IM/Audio and Video chat; Students develop interactive multimedia presentations that teach other students key concept using PowerPoint. Capture and diagram problems using digital ink in OneNote;
Reason abstractly and quantitatively	Browse web sites using IE, Access supporting text using applications on Windows; Develop presentations describing processes, reasoning, and quantitative measures using PowerPoint. Solve real world problems researched on web and visualize data in Excel
Construct viable arguments and critique the reasoning of others	Use OneNote to capture audio/video presentations of others and critiques can be noted using handwriting. Notes are synchronized and can be viewed at later time. Develop arguments with PowerPoint that include multimedia, and charts supporting thesis.
Model with mathematics	Summarize and describe distributions PowerPoint; Decide if a specified model is consistent with a given data-generating process and validate using Excel. Chart 3D equations using Word (with no cost add-in); Use probability to make decision models;
Use appropriate tools strategically	Flip classroom support using Video/Audio chat and desktop sharing; Develop complex models and analysis using Excel; Capture notes and presentations using OneNote. Use online help to validate tools.
Attend to precision	Use clarity and exact terms when communicating, leveraging Word's built in research tools.
Look for and make use of structure.	Develop understanding of rectangular arrays and their structure using Excel. Experiment with algebraic expressions to reveal underlying structure.

Common Core State Standards for Mathematical Practice	Examples of Use and Functionality
Look for and express regularity in repeated reasoning	Research websites finding appropriate and sound mathematics, and examine reasoning and logic patterns. Read text using Word's View Mode regarding historical figures and their approach to reasoning.

Table 7. Summary of Mathematical Content Standards and Tools.

Mathematical Content	Excel	Microsoft Math	Additional Supporting Tools
Counting and Cardinality	✓	✓	PowerPoint, Word, Windows /IE
Operations and Algebraic Thinking	✓	✓	PowerPoint, Word, Windows /IE
Number and Operations	✓	✓	PowerPoint, Word, Windows /IE
Measurement and Data	✓	✓	PowerPoint, Word, Windows /IE
Geometry	✓	✓	Word, PowerPoint, OneNote
Ratios and Proportional Relationships	✓	✓	PowerPoint, Word, Windows /IE
The Number System	✓	✓	Access, PowerPoint, Word, Windows /IE
Expressions and Equations	✓	✓	PowerPoint, Word, Windows /IE
Statistics and Probability	✓	✓	Word, PowerPoint, OneNote
Real Number System	✓	✓	Access, PowerPoint, Word, Windows /IE
Quantities	✓	✓	Word, PowerPoint, Word, Windows /IE
Complex Number System	✓	✓	PowerPoint, Word, Windows /IE
Vector and Matrix Quantities	✓	✓	PowerPoint, Word, Windows /IE
Seeing Structure in Expressions	✓	✓	Access, PowerPoint, Word, Windows /IE
Arithmetic with Polynomials and Rational Expressions	✓	✓	PowerPoint, Word, Windows /IE
Creating Equations	✓	✓	Access, PowerPoint, Word, Windows /IE
Reasoning with Equations and Inequities	✓	✓	Access, PowerPoint, Word, Windows /IE
Interpreting Functions	✓	✓	PowerPoint, Word, Windows /IE

Mathematical Content	Excel	Microsoft Math	Additional Supporting Tools
Building Functions	✓	✓	Access, PowerPoint, Word, Windows /IE
Linear and Exponential Models	✓	✓	PowerPoint, Word, Windows /IE
Trigonometric Functions	✓	✓	PowerPoint, Word, Windows /IE
Congruence	✓		PowerPoint, Word, Windows /IE
Similarity, Right Triangles, and Trigonometry	✓	✓	PowerPoint, Word, Windows /IE
Geometric Measurement and Dimension	✓	✓	PowerPoint, Word, Windows /IE
Modeling with Geometry	✓	✓	PowerPoint, Word, Windows /IE
Interpreting Categorical and Quantitative Data	✓		Access, PowerPoint, Word, Windows /IE
Making Inferences and Justifying Conclusions	✓		Access, PowerPoint, Word, Windows /IE
Conditional Probability and the Rules of Probability	✓		PowerPoint, Word, Windows /IE
Using Probability to Make Decisions	✓		PowerPoint, Word, Windows /IE

6.6.2.3. Next Generation Science Standards

Twenty-six states are working together on the development of the Next Generation Science Standards. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support teaching and learning described by the vision of science education in "A Framework for K-12 Science Education" inclusive of the Scientific and Engineering Practices, and Cross Cutting Concepts and reflected in the first draft version of the *Next Generation Science Standards* (http://maine.gov/doe/nextscience/index.html).

Response:

HP/Microsoft supports the Next Generation Science Standards (currently in drafts, expected to be in codified standards January 2013). We have proposed tools that form an academic platform that supports practices used by scientist as they investigate and build models across scientific domains. We have provided descriptions of our tools for review in section 6.6.1.1, which will support educating students in science and engineering, and facilitate the foundational knowledge for future scientist in the classrooms of today.

Educators around the world use Microsoft tools because of their flexibility, features, and capacity for to produce vibrant, high quality science content. Microsoft Office 365 for Education supports students and teachers with online services that enable collaboration, content development, and communication tools. Educators, staff, and students get anywhere access to email and calendars, Office Web Apps, video and online meetings, and document sharing. Office 2013 supports simple and advanced education needs with flexible yet powerful capabilities and allows for rich, high quality content development.

In addition to our Office and Windows technologies, IT Academy provides additional support with Engineering, Technology, and Applications of Science standards. IT Academy provides e-Learning content used either out of the box with existing curricula or parsed and integrated as needed based on the instructional needs of the teacher, district or state. It can be used as supplemental material or as a course on its own to support students as they earn Microsoft Certifications, which are Industry Recognized certifications that are independently tested and verified by a third party.

Because of the power and flexibility of our proposed academic platform, we expect that the use will evolve over time and enable transformational academic workflows. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins. In addition to describing the proposed tools, we have provided examples of anticipated student uses with our solution as they progress through the Next Generation Science Standards. We expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

Table 8. Tools Supporting the Next Generation Science Standards. Please also see our description of tools Section 6.6.1.1.

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
Feature Rich Productivity Tools on Tablets •Word •Lync •PowerPoint •Publisher •Outlook •OneNote •Access •Excel	*Cloud based Tools* Video conferencing & IM; Word, Excel, PowerPoint, OneNote and Outlook Office Web Apps for web-based viewing and editing, professional email, share files inside and outside school Your data belongs to you – Microsoft does not scan emails or documents for advertising purposes.	*Desktop Capabilities on Tablet form factors* Windows supports students and teachers with desktop power using tablet form factors. Accessibility, Security and Privacy Features. Beautiful, fast, and fluid experience that students can personalize with the people, applications, and sites they need.	*Education, Publisher and other Education Apps* Apps from Windows and Office Stores Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0-step by step graphing calculator supporting mathematics and science standards.

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
	Compliant with Industry Standards & leadership in transparency Secure Student and Teacher Data.	Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	Optional scientific tools from Microsoft Research IT Academy-Supporting CTE Standards

The proposed Microsoft platform provides tremendous flexibility and capabilities for teachers and students. Our technology supports a diverse range of activities across content areas and grade levels.

Students can conduct remote field research away from Internet connections, capture findings using their portable device's video camera, and updates their work to the cloud when they are able to connect to the Web. A student working on their phone can review a project rubric while on the bus. Using their portable device, students are able to record video of data collection and the video is synchronized with notes on the class rubric in OneNote.

While conducting research, students can view streamed video from Internet resources with IE. Collaboration and coauthoring support the writing process in real time using Word. Students hold video and IM chats with science peer coaches and update meeting calendars using Outlook. Away from school, another group of students reviews video for a flipped classroom activity. Math students add equations, symbols, and digital ink to their presentations. History teachers share examples of high quality writing texts using a class portfolio in OneNote. Middle school students create an "interactive book" using the interactive multimedia features in PowerPoint.

Table 9. Next Generation Science Standards.

Next Generation Science Standards	Attributes	Summary of Technology Features and Examples
Practices	Scientific and Engineering Practices 1. Asking questions (for science) and defining problems (for engineering) 2. Developing and using models 3. Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computational thinking	Students are able to ask questions and define problems across tools, but may find OneNote especially helpful as it is a digital notebook, which can take notes, audio notes, video notes, and search across notebooks for key words, recognize handwriting (digital ink). Windows and IE support fast, fluid touch enabled web

Next Generation Science Standards	Attributes	Summary of Technology Features and Examples
	6. Constructing explanations (for science) and designing solutions (for engineering) 7. Engaging in argument from evidence 8. Obtaining, evaluating, and communicating information	browsing with the sites students and teachers need. Students and teachers can visit Microsoft Research, for example to gain technical and scientific papers, download them and read them. They can also access scientific tools, and other no cost tools supporting scientific exploration. Students can develop models using Excel, describe data using Word, and present findings using video and interactive multimedia found in PowerPoint. Students can use SmartArt to depict complex ideas in graphical format with ease. Collaborate and coauthor content using Office. Engage in argument from evidence and document research easily and efficiently with Word. Easily generate Works Cited and Bibliography pages and manage citations. Communicate online with video/IM/Chat and email.
Crosscutting Concepts	1. Patterns 2. Cause and effect: Mechanism & explanation 3. Scale, proportion, & quantity 4. Systems and system models 5. Energy and matter: Flows, cycles, & conservation 6. Structure and function 7. Stability and change	Discover and evaluate patterns using Microsoft Excel, visualize data (scale, proportion, and quantity) represent flows, cycles, and conservation with digital ink, online images, search online for Creative Commons images without leaving Office. Develop presentations for individual use, small or large group presentations in person and online. Conduct research across scientific domains and use OneNote to capture printed

Next Generation Science Standards	Attributes	Summary of Technology Features and Examples
		material digitally, and capture URL and citation information as part of research collection. Evolve knowledge and document findings with Word.
Disciplinary Core Ideas	Physical Sciences PS1: Matter and its interactions PS2: Motion and stability: Forces and interactions PS3: Energy PS4: Waves and their applications in technologies for information transfer Life Sciences LS1: From molecules to organisms: Structures and processes LS2: Ecosystems: Interactions, energy, and dynamics LS3: Heredity: Inheritance and variation of traits LS4: Biological evolution: Unity and diversity Earth and Space Sciences ESS1: Earth's place in the universe ESS2: Earth's systems ESS3: Earth and human activity Engineering, Technology, and Applications of Science ETS1: Engineering design ETS2: Links among engineering, technology, science, and society	Use optional no cost Add ins and Office Apps that extend Microsoft Office and Windows, such as model molecules in Word using Chem4Word Add-in. Additional free tools for educators are numerous, but include Worldwide Telescope, which delivers the Cosmos on the portable computing device. There are also add-in for WWT using Excel. http://www.pil-network.com/Resources/Tools has a list of no cost tools relevant for scientific learning. Office has an equation editor that provides students and teachers with easy access to galleries and developing their own equations. Windows has an input panel so students can easily add equations using handwriting. Microsoft Math add-in allows solving equations and graphing 2D and 3D equations in Word. Represent structure, processes using SmartArt. Evolve high quality information text and research text using Word. Develop creative projects and edit digital pictures using Publisher.

6.6.3. State Specific Standards

6.6.3.1. Maine

While the Provider is not required to provide educational content, each Bidder must identify all of its application software and describe how it will support educational use and how it will align tools and resources with Maine's *Learning Results* including the *Common Core State Standards*. In addition, the Department anticipates that upon completion, the Next Generation Science Standards will be adopted. More information about Maine's adopted academic standards and its involvement with *Next Generation Science Standards* development may be found here:

- http://maine.gov/doe/teaching/standards.html

Response:

HP/Microsoft proposes compliant tools supporting teachers and students and facilitating the Common Core State Standards and State Specific Standards for Maine. In addition, HP/Microsoft proposes alignment with Maine's Learning Results Standards and will work with the state to further refine these alignments if desired, when awarded.

At HP/Microsoft, our focus remains enabling people around the world to realize their full potential. An important part of that commitment has been helping individuals develop the skills necessary to succeed in an increasingly complex, technologically advanced, and competitive world. Our proposed, compliant academic platform facilitates diverse education tasks and supports teacher and student education needs and supports the Common Core Standards and Maine's state standards.

Table 10. Technology Tools Overview:

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
Feature Rich Productivity Tools on Tablets •Word •Lync •PowerPoint •Publisher •Outlook •OneNote •Access •Excel	*Cloud based Tools* Video conferencing & IM; Word, Excel, PowerPoint, OneNote and Outlook Office Web Apps for web-based viewing and editing, professional email, share files inside and outside school Your data belongs to you – Microsoft does not scan emails or	*Desktop Capabilities on Tablet form factors* Windows supports students and teachers with desktop power using tablet form factors. Accessibility, Security and Privacy Features. Beautiful, fast, and fluid experience that students can personalize with the	*Education, Publisher and other Education Apps* Apps from Windows and Office Stores Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0-step by step graphing calculator supporting mathematics and

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
	documents for advertising purposes. Compliant with Industry Standards & leadership in transparency Secure Student and Teacher Data.	people, applications, and sites they need. Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	science standards. Optional scientific tools from Microsoft Research IT Academy-Supporting CTE Standards

Table 11. Summary Compliant and Relevant Tools with Examples.

Summary Compliant & Relevant Tools	Envisioned Use Examples
Access 2013 Basic and Advanced Database, Reporting, Design	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements across disciplines/content areas and grade levels. Supports data analysis and modeling. Develop advanced data models, support analysis, capture data, develop reports, conduct analysis. Support computational thinking and informational management; synthesized knowledge and creativity with database functionality.
Excel 2013 Basic and Advanced High Quality Computation, Analysis, Modeling, Spreadsheet, Collaboration, Communication	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements. Develop and conduct fundamental and advanced data analysis; develop rich data visualizations; recognize patterns and support computational thinking with charts and real time data from websites. Support mathematics and science concepts using real world tools used by researchers and employers; supporting computational thinking activities, such as incorporating data, visualizations, and charts, support research and develop data to demonstrate evidence based & research texts. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.
IT Academy, DreamSpark, Career Forward, Kodu	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements. Engage computational thinking, data analysis, writing, reading, data analysis, modeling, presentations, and multi-media creation using IT Academy. Comprehensive CTE offering supporting technology readiness and certification initiatives with real world tools used by employers; e-learning & teacher resources, curriculum, & software. Students develop projects with ITA learning and take certification exams providing them with industry recognized certifications/credentials in addition to a high school diploma. Easy to

Summary Compliant & Relevant Tools	Envisioned Use Examples
	use visual programing language for K-5 students using Kodu as an alternative assessment, students develop game-based projects employing computational thinking supporting nontechnical, academic subjects- play using Xbox
Lync IM/Audio/Video Chat/Desktop Sharing/Polls/ Online Whiteboards	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements. Enables synchronous, online collaboration, sharing, desktop and document sharing, recording online meetings for video playback, presence awareness, supporting text based communication with individuals and groups; individual, group and class distance learning, interview industry experts, invite students to work on Flipped Classroom activities after school, integrates with Microsoft Office Word, PowerPoint, Excel, OneNote and Outlook.
Microsoft Math 4.0 Basic and Advanced Mathematics Graphic Calculator, step by step equation solver	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements. Step by step problem solving, develop high quality 3D and 2D graphs. Supporting computational thinking. Support formula and triangle equations, support remediation of mathematics, support computational thinking and data analysis.
Office 365 for Education Cloud-based, Secure Communication & Collaboration, Productivity, Office Web Apps	Supporting Mathematics CCSS ELA and NGSS (Science) standards, individual state requirements. Online Cloud storage, email store, IM/Audio/Video communications; Office Web Apps; interactive distance learning, research and engagement with other cultures on line, video/audio, support learning needs across academic content areas and throughout desired grade levels.
OneNote 2013 Easy to Use Flexible Digital Notebook	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements across disciplines/content areas and grade levels. Capture video notes, audio notes, handwritten notes, record performances, speaking, narration, listening activities, develop writing examples, share and co-author notes, capture digital inked notes. Review synchronized audio/video and notes.
Optional/ Additional 3rd party applications Available at the Windows and Office Store & Side Loaded Apps	Capable of supporting multiple CCSS and individual state standards. Additionally, no cost and low cost third party applications are also available to provide optional, added support for this requirement if desired. Add applications for Windows and Office to extend and customize. Add consumer, education and third party applications supporting possibilities for existing and new instructional tasks and workflows; Internet Explorer 10 Add-in support third party website capabilities; access publisher content, develop videos with MovieMaker, manipulate digital images using Photo Gallery. Use PhotoSynth to create panoramas and 3D photo environments;

Summary Compliant & Relevant Tools	Envisioned Use Examples
	Interactive Classroom used for real time polling/interactivity with K-6 students
Outlook 2013 Definitive email, Message & Calendars	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements across disciplines/content areas and grade levels. Enables asynchronous communications. Manage email, calendars for student meetings; collaborate with teachers, students and researchers. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.
PowerPoint 2013 Basic and Advanced High Quality, Interactive, multimedia Authoring, Collaboration, Communication, Personal Tablet, In Person, On Line Presentations	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements across disciplines/content areas and grade levels. Develop audience, on line, and individual interactive multimedia texts and presentations, edit video and photos inside PowerPoint. Save to HD video, collaborate and coauthor with students, researchers, and distant experts, presentations and publishing, present findings with appropriate language, vocabulary supporting listening and language activities. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.
Publisher 2013 Basic and Advanced Content Publishing, Simplified Site Design, Creative Design	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's Learning Results requirements across disciplines/content areas and grade levels. Supporting student presentations and publishing. Supporting writing. Publisher allows students to transform text into fine typography projects for the screen or in print. Students use stylistic sets, and can use new Text Effects, Picture Effects, and even print out photos if needed using new Photo Center Printing.
Windows & IE Fluid, Fast Operating System supporting Touch, Keyboard, Mouse, with Access to sites students and teachers need.	Supporting CCSS ELA, CCSS Mathematics, NGSS, and Maine's learning Results requirements across disciplines/content areas and grade levels. Provides touch capabilities, digital ink, equation input with digital ink, optional stylus/touch tablet accessory, accessibility, speaking/narration, speech recognition, built in snipping tool, calculator. Access publisher, content developer and education related content. Add applications for Windows and Office to extend and customize. Add consumer and third party applications and supporting possibilities for existing and new instructional tasks and workflows. Internet Explorer 10 supports information management, research, website browsing, streaming, safety and security
Windows Live Movie Maker & Photo Gallery Digital image and	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements across disciplines/content areas and grade levels. Powerful, simple digital photo editing, import, edit and share digital photos. Quick, Fast movie creation, edit clips, audio, add effects, and

Summary Compliant & Relevant Tools	Envisioned Use Examples
movie creation and editing	share movies. Support creative and instructionally related digital images and movies for use in presentations and supporting textual evidence. Visually and audibly represent abstract and concrete, concepts. Incorporate across disciplines and content areas and grade levels.
Word 2013 Fundamental & Advanced High Quality Authoring, Text Development, Word Processing, Collaboration, Communication, Reading	Supporting ELA, Mathematics and Science CCSS, Maine's Learning Results, multiple language support. Built in translation tool, research tool, and search tools. View texts and video playback inside Word. Coauthor in real time. Open PDF files, edit and save. Edit photos inside Word. Search for Online video and photos inside Word, Receive Readability Statistics, and interactive grammatical and spelling feedback. Communicate research findings. Create literary,. creative, technical, informational, research and other texts. Document findings, conclusions, and document synthesized knowledge and concepts. Manage citations, references, and generate Works Cited and Bibliography pages. Use during presentations and publishing supporting listening, language and communications tasks. Create high quality, evolve and elaborate text; read informational and literary texts. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.

Table 12. HP/Microsoft's Alignment with Maine's Learning Results.

Maine's Learning Results	HP/Microsoft Alignment
A. A clear and effective communicator who: 1. Demonstrates organized and purposeful communication in English and at least one other language; 2. Uses evidence and logic appropriately in communication; 3. Adjusts communication based on the audience; and 4. Uses a variety of modes of expression (spoken, written, and visual and performing including the use of technology to create and share the expressions);	A. HP/Microsoft propose software that supports students who are clear and effective communicators, and recommends Microsoft Office 365 for Education, Windows, and Internet Explorer as the primary platforms to support these goals. Microsoft Office contains productivity and communication applications and capabilities to support stated requirements.
B. A self-directed and lifelong learner who: 1. Recognizes the need for information	B. HP/Microsoft understand and propose software that supports students who self-directed and lifelong learners, and recommends Microsoft

Maine's Learning Results	HP/Microsoft Alignment
and locates and evaluates resources; 2. Applies knowledge to set goals and make informed decisions; 3. Applies knowledge in new contexts; 4. Demonstrates initiative and independence; 5. Demonstrates flexibility including the ability to learn, unlearn, and relearn; 6. Demonstrates reliability and concern for quality; and 7. Uses interpersonal skills to learn and work with individuals from diverse backgrounds;	Office 365 for Education, Microsoft Office, Windows, Internet Explorer as the primary platforms to support these goals. Microsoft Office contains productivity and communication applications and capabilities to support stated requirements and also supports scheduling and calendars. Microsoft Office and OneNote provide an excellent video and textual journaling platform for reflective activities that support these standards. Outlook supports calendaring which can provide help as students build reliability and communication skills across diverse backgrounds.
C. A creative and practical problem solver who: 1. Observes and evaluates situations to define problems; 2. Frames questions, makes predictions, and designs data/information collection and analysis strategies; 3. Identifies patterns, trends, and relationships that apply to solutions; 4. Generates a variety of solutions, builds a case for a best response and critically evaluates the effectiveness of the response; 5. Sees opportunities, finds resources, and seeks results; 6. Uses information and technology to solve problems; and 7. Perseveres in challenging situations;	C. HP/Microsoft understand and propose software that supports students who are creative and practical problem solvers, and recommends Microsoft Office 365 for Education and Windows as the primary platforms to support these goals. Microsoft Office contains productivity and communication applications and capabilities to support stated requirements and also supports scheduling and calendars. Microsoft Office and OneNote in addition to Outlook support these goals. Additionally Excel and Access can support pattern recognition trends identification through stunning data visualizations and reporting. Excel also contains visualization tools which provide vivid data representation. Both Windows and Office families have online and off line help to assist students should they need help with technology, so they can perverse if challenged.
D. A responsible and involved citizen who: 1. Participates positively in the community and designs creative solutions to meet human needs and wants; 2. Accepts responsibility for personal decisions and actions; 3. Demonstrates ethical behavior and the	D. HP/Microsoft understand and propose software that supports students who A responsible and involved citizens, and recommends Microsoft Office 365 for Education and Windows (publisher applications) and Internet Explorer (student web research). Microsoft Office Word, PowerPoint and communications tools support student engagement with cultures and help students

Maine's Learning Results	HP/Microsoft Alignment
moral courage to sustain it; 4. Understands and respects diversity; 5. Displays global awareness and economic and civic literacy; and 6. Demonstrates awareness of personal and community health and wellness;	become aware of larger social, economic, and global issues. Microsoft Word has citation management, and can efficiently and quickly compile a Works Cited and Bibliography page in support of responsible academic behavior.
E. An integrative and informed thinker who: 1. Gains and applies knowledge across disciplines and learning contexts and to real life situations with and without technology; 2. Evaluates and synthesizes information from multiple sources; 3. Applies ideas across disciplines; and 4. Applies systems thinking to understand the interaction and influence of related	E. HP/Microsoft understand and propose software that supports students are an integrative and informed thinkers, and recommends Microsoft Office 365 for Education, Windows and Internet Explorer. Word, Excel, Access and Publisher allow students to evaluate and synthesize information from multiple sources. OneNote also is emphasized as it can assemble a portable and accessible collection of learning and work products that allow students to draw upon and synthesize prior experiences from multiple sources and coauthor shared research and notes in real time and also access work off line.

6.6.3.1.1. *Career and Education Development*

Career and education development helps all students gain the knowledge, skills, and behaviors to interact with others, set goals, and make decisions related to career, college, and citizenship. These are the skills and knowledge that underlie the *Common Core State Standards* and all content areas and are also known as "College and Career Readiness". Bidders should focus on tools and functionalities that assist students to create and update personal profiles and interest inventories, do career research, make college and career decisions, and set goals and solve problems.

Response:

HP/Microsoft propose a co-developed a compliant tool: CareerForward is an online course that hopes to educate millions of students about globalization, career planning and entrepreneurship. Students will experience online learning with the program, understand the crucial importance of education and their future, and learn how to take charge of their future.

It is important to understand that CareerForward course is a self-contained online learning course that may be used in companion with a variety of online career planning tools to provide students with the opportunity to assess their career interests, explore career options and create an educational development plan. It may also be used alone or in combination with existing resources, if desired.

Additionally, CareerForward was developed by MVU® through substantial partnership support from both Microsoft Corporation and the Michigan Department of Education. It is designed to help students understand how to plan their work lives and career opportunities amid the implications of the global economy. This award-winning online course is a powerful way to help students wrestle with some of the provocative questions about their future. Moreover, CareerForward introduces students to globalization and career planning, and highlights how students can be more entrepreneurial as they look to the future.

As a result of major investments by Microsoft's Partners in Learning program and MVU, this innovative course is now available to all secondary students at no fee. Professional development and training plans related to CareerForward are made available at no fee for state-funded educational institutions. The CareerForward course uses personal reflection and activities to provide each student with an independent exploration of the possibilities of their future and the creation of an Educational Development Plan (EDP).

Table 13. CareerForward

CareerForward	
Prerequisites:	None
Course Style:	Blended, teacher facilitated; 4 to 6 weeks in length; 20 hour-long online sessions
Price:	No cost
Availability:	Now
Technology Requirements:	The *CareerForward* course was designed to deliver high-quality multimedia content efficiently to students using Adobe Flash®, which is now installed on over 95% of personal computers with access to the Internet. Due to imbedded audio files, students and teachers need a multimedia computer with headphones, and access to *MVU* servers, or your school's local installation of *CareerForward.* The most recent version of Internet Explorer, Firefox or Safari is recommended. Flash must be installed to access the multimedia components and Adobe Reader® is needed to access imbedded documents.

6.6.3.1.2. *Career and Technical Education*

The Career and Technical Education (CTE) centers provide over 60 programs of study, many of which require specialized equipment and tools that are beyond the scope of this RFP. For more information about the programs offered in Maine common CTE centers, see:

http://www.maine.gov/education/it/

Bidders must describe how its solution will support effective teaching and learning in the CTE centers in Maine in general. If specific functions and tools included in the solution have specific application for a program of study offered in Maine CTE centers, the Bidder should describe those specific uses within the context of that program of study.

Response:

The Microsoft IT Academy Program is a college- and career-ready education program available to all accredited academic institutions, designed to provide students with the 21st century technology skills necessary to acquire certification and be competitive in today's rapidly evolving workplace. The IT Academy Program also provides educators and staff with professional development opportunities.

This subscription-based membership offers a world-class technology curriculum with lesson plans, E-Learning, student projects, and assessments. To date, there are more than 10,000 IT Academy members in more than 160 countries. IT Academy provides support for technology programs, and can be used and adapted to support interdisciplinary or integrated technology instruction.

Resources available through the IT Academy Program give educators the opportunity to stay up-to-date on the latest Microsoft technologies and easily integrate these technologies into new or existing curricula. With these resources, educators can tailor classes to meet the needs of students of all ages and levels of experience.

The IT Academy program provides the E-Learning necessary to get students ready to become Microsoft Certified. Such a certification is Industry Recognized as it is issued by a tested and verified by a third party, Certiport, who specializes in Microsoft and other technology testing and issues a credential which is recognized by employers globally. Students are able to walk across the graduation stage with not only a high school diploma, but potential multiple certifications that get them college and career ready.

Program Features

IT Academy offers the following:

- The latest Microsoft software for labs, classrooms, and PCs used by students.
- Access to a wide range of Microsoft E-Learning courses and the Instructor Learning Management System (LMS) to help track and monitor student progress.
- Discounts on official courseware that is available to academic institutions only.
- E-Reference Libraries that offer instant access to over 127 Microsoft Press books online.
- TechNet subscriptions, which provide a wealth of resources for educators seeking to expand their professional development and students mastering IT professional concepts and skills.

Microsoft currently has over ten statewide IT Academy agreements where all students in high school are able to take advantage of the program benefits. Microsoft works with states to ensure successful teacher training and deployment. Microsoft proposes tools to support CTE teaching and learning activities, which are likely used by the students' future employers. These real world tools offer not meaningful academic experiences, but also get students ready to use the tools employers to run diverse businesses such as those used in global commerce, industry, and manufacturing, scientific, technology, research, and biomedical corporations, as examples.

Table 14. Features of Compliant Microsoft Academic Platform Tools

Compliant Microsoft Academic Platform Tools	Feature Summary & Examples of Use
CareerForward	Developed by Michigan Virtual University, Microsoft Corporation, and the Michigan Department of Education, this award winning online experience allows students to develop individual career plans, connect education with college and career goals, and engages students with real world situations;
DreamSpark for Students	Students develop applications, stage servers and further technical interests with no cost software downloaded for home use. Tools include development tools, Kodu, robotics. Please see www.dreamspark.com for the latest program information.
Excel	Provides easy and advanced data analysis and very rich data visualization of complex data; functions and capabilities used by employers; real time data connections to websites containing tables; connect to other cloud and local data sources. Coauthor workbooks in real time; support for diverse file formats;
IE & Windows	IE's fast, fluid web browsing, privacy; Windows delivers power of a desktop with touch, accessibility, security, research, narration, Math input panel; calculator; handwriting, students can write papers and control device using speech recognition, handwriting input; digital ink support; device can be controlled using touch, speech, handwriting, mouse and keyboard controls
IT Academy	Students engage in e-learning and software to ready themselves to receive a Microsoft Certification-a Global, Industry Recognized Certification; resources, curriculum; professional development for teachers
Microsoft Office	Microsoft's Integrated productivity tools (Word, Excel etc. integrated with Cloud, IM, social media, supports wide range of diverse file formats, inspect documents for accessibility) providing remarkable powerful and easy to use, advanced functionality on tablets. High quality content development and the standard for feature rich, flexible, efficient technologies that can support transformative education tasks and workflows. Edit digital images, add video, represent complex ideas and reading strategies using SmartArt; insert symbols, graphics, charts, images, video and other content.

6.6.3.1.3. *English Language Arts*

Maine has adopted the Common Core State Standards for English Language Arts (**Section 6.6.2.1 *Common Core State Standards for English Language Arts***).

Response:

Please reference section 6.6.2.1 for our approach to Common Core State Standard for English Language Arts.

6.6.3.1.4. *Health and Physical Education*

Maine updated the Learning Results for Health and Physical Education in 2007. The updates included a focus on leveraging the learning goals embedded in the standards "to enhance health". While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support the teaching of and the learning of the outcomes described by the Learning Results for Health and Physical Education.

Response:

Microsoft's proposed platform supports students and teachers and facilitates education needs and The Common Core Standards, Maine's State Standards and their outcomes. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins. We have provided a table for reference that depicts a summary of tools, functionality, requirements. Additionally, we have provided examples of anticipated student uses with our solution. We expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

Table 15. Health and Physical Education Learning Results with Examples.

Health and Physical Education Learning Results	Tasks & Activities	Supporting Tools	Examples
Health Education gives students the knowledge and skills to thrive physically, mentally, emotionally, and socially. It contributes to students' ability to successfully practice behaviors that protect and promote health, and avoid and reduce health risks. Health education helps	Analyzing the reliability and validity of media and health resources; communicating effectively using refusal and conflict management skills; setting goals; and making healthy decisions	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote	▪ Explain the physiological indicators that accompany different types of moderate to vigorous physical activities using PowerPoint ▪ Analyze website messaging and media regarding health and trends affecting healthy

Health and Physical Education Learning Results	Tasks & Activities	Supporting Tools	Examples
students to be better consumers of information, manage stress, and make healthy decisions in the face of conflicting messages. It assists them in living healthier lives. Students who participate in physical education on a regular basis learn the benefits of physical activity and its contribution to a healthy lifestyle.			lifestyle. ▪ Research conflict management skills that are effective in both school and as an adult using IE and presented in PowerPoint. ▪ Evaluate data on websites regarding health claims, compare to medical and FDA data and contrast findings using OneNote and PowerPoint. ▪ Chart physical fitness correlation to longevity using Excel, researched using IE.
Physical education provides students with the skills and knowledge needed to support participation in a wide variety of physical activities that contribute to an active lifestyle.	Physical Education provides the building blocks for skill development, skill analysis, physical fitness, stress reduction, decision-making, and positive social skills. Students learn to assess and set goals, evaluate their own physical fitness, and use the knowledge to maintain or improve their current fitness level.	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote	▪ Evaluate goals using OneNote to record performance data ▪ Record Physical progression through fitness challenges using OneNote and digital notes

Table 16. The Proposed Microsoft Academic Platform Supporting Education Needs

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
Feature Rich Productivity Tools on Tablets •Word •Lync •PowerPoint •Publisher •Outlook •OneNote •Access •Excel	*Cloud based Tools* Video conferencing & IM; Word, Excel, PowerPoint, OneNote and Outlook Office Web Apps for web-based viewing and editing, professional email, share files inside and outside school Your data belongs to you – Microsoft does not scan emails or documents for advertising purposes. Compliant with Industry Standards & leadership in transparency Secure Student and Teacher Data.	*Desktop Capabilities on Tablet form factors* Windows supports students and teachers with desktop power using tablet form factors. Accessibility, Security and Privacy Features. Beautiful, fast, and fluid experience that students can personalize with the people, applications, and sites they need. Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	*Education, Publisher and other Education Apps* Apps from Windows and Office Stores Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0-step by step graphing calculator supporting mathematics and science standards. Optional scientific tools from Microsoft Research IT Academy-Supporting CTE Standards

6.6.3.1.5. *Mathematics*

Maine has adopted the Common Core State Standards for Mathematics (**Section 6.6.2.2 *Common Core State Standards for Mathematics***).

Response:

Please reference section 6.6.2.2 for our approach to Common Core State Standard for Mathematics.

6.6.3.1.6. *Science and Technology*

Maine is a lead state in the development of the Next Generation Science Standards, and it anticipates that these standards will be adopted upon completion (**Section 6.6.2.3 *Next Generation Science Standards***).

Response:

Please reference section 6.6.2.3 for our approach to Science Standards.

6.6.3.1.7. *Social Studies*

Social studies education involves the exploration of the social sciences and humanities, including geography, civics and government, economics, and history in order to develop responsible, informed, and engaged citizens. Effective teaching and learning in social studies rely heavily on the usage of multiple primary and secondary sources and research. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support the teaching of and learning of the outcomes described by Maine's *Learning Results* for Social Studies with a particular emphasis on fostering civic, global, historical, geographic, and economic literacy and the development of critical thinking and problem-solving skills; investigation, research and reading skills; oral and written communication; presentation skills; and collaboration skills.

Response:

Social studies education involves the exploration of the social sciences and humanities, including geography, civics and government, economics, and history in order to develop responsible, informed, and engaged citizens. Effective teaching and learning in social studies rely heavily on the usage of multiple primary and secondary sources and research. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support the teaching of and learning of the outcomes described by Maine's Learning Results for Social Studies with a particular emphasis on fostering civic, global, historical, geographic, and economic literacy and the development of critical thinking and problem-solving skills; investigation, research and reading skills; oral and written communication; presentation skills; and collaboration skills.

HP and Microsoft understand and have proposed compliant technology supporting these standards and requirements.

Microsoft's proposed platform supports students and teachers and facilitates education needs and The Common Core Standards, individual state standard*s* and their outcomes. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins. We have provided a table for reference that depicts a summary of tools, functionality, requirements. Additionally, we have provided examples of anticipated student uses with our solution. We expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

Table 17. Social Studies Learning Results.

Social Studies Learning Results	Tasks & Activities	Alignment/Supporting Tools
Applications of Social Studies Processes, Knowledge, and Skills	Researching and Developing Positions on Current Social Studies Issues Making Decisions Using Social Studies Knowledge and Skills Taking Action Using Social Studies Knowledge and Skills	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote
Civics and Government	Knowledge, Concepts, Themes, and Patterns of Civics/Government Rights, Duties, Responsibilities, and Citizen Participation in Government Individual, Cultural, International, and Global Connections in Civics and Government	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote
Economics	Economic Knowledge, Concepts, Themes, and Patterns Individual, Cultural, International, and Global Connections in Economics	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote
Geography	Geographic	▪ Windows

Social Studies Learning Results	Tasks & Activities	Alignment/Supporting Tools
	Knowledge, Concepts, Themes, and Patterns Individual, Cultural, International, and Global Connections in Geography	▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote
History	Historical Knowledge, Concepts, Themes, and Patterns Individual, Cultural, International, and Global Connections in History	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ Excel ▪ PowerPoint ▪ OneNote

6.6.3.1.8. *Visual and Performing Arts*

The Visual and Performing Arts encompasses many different forms of artistic expression, and students and teachers need to be able to both create, edit/manipulate, capture, and view these different forms of artistic expression. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support teaching and learning including:

- The capacity to capture live performance for assessment (both self-assessment and assessment by others) and as an artifact of the performance itself -- which may be later used for any number of activities -- assessment, sharing, archiving, remixing into new expressions, etc.

Response:

HP/Microsoft's proposed platform supports students and teachers and facilitates education needs and The Common Core Standards, Maine's Individual State Standards and outcomes. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins. We have provided a table for reference in section 6.6.1.1 that depicts a summary of tools, functionality, requirements. We expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

Windows can be used to capture and playback video with applications; Audio/Video notes are available in OneNote 2013. Capture video recordings using Lync; OneNote has the capacity to capture live performances for assessment and can be stored on the tablet or using Office 365 for Education in the Cloud. Audio and video recordings that created with OneNote are directly linked to any notes taken while the recording is made. This lets students and teachers search and find specific notes that are associated with a particular part of a recording Video and Audio. Windows Live Movie Maker and Photo Gallery allow students to express creativity and develop movies and manipulate digital images and add audio mixes. Content can be shared or used later for other education tasks.

- The capacity to create and manipulate audio, video, and visual media as a mode of creativity and expression.

Response:

Windows Live Photo Gallery and Movie Maker are no cost options that allow creation of audio, video, digital photos for a variety of creative expression. Edit the soundtrack and add a theme. Enhance the movie with audio and a visual theme. Movie Maker adds transitions and effects automatically which can save instructional time. Movies may be shared online.

Additionally, no cost and low cost third party applications are also available to provide optional, added support for this requirement if desired.

Publisher and Office tools allow students and teachers to apply their creativity and expression using audio, video and digital pictures with built in tools.

- The capacity to view/hear artistic work for the purposes of analysis, comparison, evaluation, etc.

Response:

Windows has applications to capture and playback recorded audio and video to view/hear artistic work for the purposes of analysis, comparison, and evaluation. Office also has OneNote, which has the capacity to capture and play back live performances, group activities, and view/hear artistic work for analysis, comparison, evaluation or critical assessment. Additionally, students are able to view and hear the playback of the artistic work for analysis, comparison, and evaluation.

As described above, audio and video recordings created with OneNote are directly linked to any notes taken while the recording is made. Audio only or Audio/Video notes are available in OneNote 2013. Students may take notes using handwriting, keyboard and import screen clippings from websites as well.

6.6.3.1.9. *World Languages*

Maine has a goal to graduate all students proficient in a world language. This includes the capacity to communicate both orally and in writing. While the Provider is not required to provide educational content, Bidders must describe the tools and functionalities included in the solution that will support teaching and learning of a world language.

This includes tools and functionalities that support both productive (speaking, writing, showing) and receptive (listening, reading, and viewing) modes of communication. Further, the Bidder must describe how its solution's tools and functionalities support different form of communication:

- Interpersonal (direct communication between individuals)
- Interpretive (individual receives communication by listening, seeing, or reading), and
- Presentational (individual delivers communication orally, written, or some recorded form when the receiver is not expected to provide direct feedback including a one to many style of communication)

In addition, proficiency in a world language requires cultural knowledge as it relates to differences in how communication is produced and received. Bidders must describe how its solution supports the teaching and learning of cultural knowledge.

Response:

HP/Microsoft understand the requirements and standards for world languages and have proposed compliant tools that support teaching and learning of world language. Our tools support productive, receptive, and heterogeneous modes of communication supporting instruction and support the needs for world languages.

Table 18. World Languages – Summary of Functionality of Modes of Communication.

World Languages Modes of Communication	Summary of Functionality and Student Use
Productive (speaking, writing, showing)	Create Audio/Video notes in OneNote; capture handwriting in OneNote; Author texts with foreign languages set in Word; grammar and spelling checked in Word; authoring creative text projects using Publisher; Develop classroom portfolio and student portfolios using OneNote; coauthoring and presenting projects PowerPoint; Develop interactive, multimedia “eBook” using PowerPoint; develop email correspondence using Outlook; share work using shared desktop, IM, Audio and Video chat; site interactive content Internet surfaced using Internet Explorer; Coauthor, collaborate and communicate with Office 365 for Education Cloud; email correspondence using Outlook; Flip classroom support using IE, optional 3rd party applications if desired

World Languages Modes of Communication	Summary of Functionality and Student Use
Receptive (listening, reading, and viewing) modes of communication	Listen to audio class notes, view class Video Notes using OneNote Audio/Video notes and recordings; Reading and annotating world language texts; Read teacher curated text collected in OneNote; Authored text shared in OneNote; Co-author and present with PowerPoint 1:1, 1:many online and in class; Using third party content provider and publisher applications on Windows, view streamed content, browse and read web content using IE; email, message video, IM, record meetings with Office 365 for Education; Review flipped classroom content using IE and video applications, optional 3rd party applications if desired

Table 19. Worlds Languages Requirements

State of Maine World Languages Requirements	Supporting Technology
Interpersonal (direct communication between individuals)	Microsoft Office, Office 365 for Education; Windows, Internet Explorer; optional third party applications if desired.
Interpretive (individual receives communication by listening, seeing, or reading)	Microsoft Office, Office 365 for Education; Windows, Internet Explorer; optional third party applications if desired.
Presentational (individual delivers communication orally, written, or some recorded form when the receiver is not expected to provide direct feedback including a one to many style of communication)	Microsoft Office, Office 365 for Education; Windows, Internet Explorer; optional third party applications if desired.

6.6.3.2. Hawaii

While the Provider is not required to provide educational content, each Bidder must identify all of its application software and describe how it will support educational use and how it will align tools and resources with Hawaii's adopted academic standards – the *Common Core State Standards for English Language Arts* and Literacy in History/Social Studies, Science, and Technical Subjects; the *Common Core State Standards for Mathematics*; and HCPS III for CTE, fine arts, physical education, and world languages.

Hawaii also anticipates adopting the Next Generation Science Standards, pending their completion in 2013. More information about Hawaii's adopted academic standards may be found here:

http://standardstoolkit.k12.hi.us/index.html

Response:

HP/Microsoft's proposed platform supports students and teachers and facilitates education needs and The Common Core Standards, individual state standards and their outcomes. Our proposed academic platform provides students and teachers with software tools that provide rich productivity and user experiences. Therefore, we have proposed Microsoft Office 365 for Education, Microsoft Office, Windows, Internet Explorer and additional, optional applications and add-ins. We have provided a table for reference in section 6.6.1.1 that depicts a summary of tools, functionality, requirements. We expect that teachers and students will evolve the anticipated technology tasking as part of the transformative process.

In alignment with the models adopted, Microsoft supports Innovative Educator workshops designed to educate trainers and teachers on instructional best practices using technology. These workshops integrate the tools proposed as part of our Microsoft Innovative Educator workshops. Microsoft also offers online courses, materials, resources and provides easy to understand help files and on-line training materials. Moreover, additional information regarding the training content for Microsoft Office can be found at http://office.microsoft.com/en-us/help/training-FX101782702.aspx.

Together, HP/Microsoft's proposed tools deliver a compliant academic platform that supports Hawaii's overarching goals to foster students that are:

- **Self-directed learners:** The ability to be responsible for one's own learning
- **Community Contributors**: The understanding that it is essential for human beings to work together
- **Complex Thinkers**: The ability to be involved in complex thinking and problem solving
- **Quality Producers:** The ability to recognize and produce quality performance and quality products
- **Effective Communicators:** The ability to communicate effectively
- **Effective and Ethical Users of Technology:** The ability to use a variety of technology effectively and ethically

We have provided compliant tools supporting state specific requirements and those relating to the Common Core State Standards. We have aligned Microsoft tools in our compliant, academic platform with the Hawaii Content and Performance Standards III for CTE, Fine Arts, Physical Education, and World Languages in the following tables:

Table 20. HCPS III Career and Technical Education.

HCPS III CAREER AND TECHNICAL EDUCATION *Alignment Guide*	Aligned Tools	Examples
TECHNOLOGICAL DESIGN Design, modify, and apply technology to effectively and efficiently solve problems	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote ▪ Excel	▪ Design, modify, and apply technology to effectively and efficiently solve problems by customize Ribbon to provide access to personalized, frequently used features and explain in detail ▪ Assess, in great detail, the design of an application using rubrics created by other students and evaluate rubric's effectiveness ▪ Evaluate product reviews captured in Word and annotate helpful reviews with supporting detail. ▪ Determine overall effectiveness of a product design or solution and visualize assessment in Excel based on student developed rubric
CAREER PLANNING Explore and understand educational and career options in order to develop and implement personal, educational, and career goals	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote ▪ Excel	▪ Uses goal setting strategies to identify areas for improvement and collect in digital portfolio using OneNote ▪ Analyze, in great detail, career options that match personal interests, abilities, and skills using Excel ▪ Prepare for the job interview process, with completeness and accuracy using OneNote's audio and video notes for rehearsal and simulations

Table 21. HCPS III Fine Arts.

HCPS III FINE ARTS *Alignment Guide*	Aligned Tools	Examples
VISUAL ARTS Understand and apply art materials, techniques, and processes in the creation of works of art and understand how the visual arts communicate a variety of ideas, feelings, and experiences	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote	▪ Use Publisher to manipulate images and develop a digital advertisement incorporating principles of design ▪ Use PowerPoint to demonstrate elements of line, shape, form, texture, color, and the principles of repetition ▪ Use IE to compare and analyze artwork from various cultures that have similar cultural factors have affected works of art now and in the past
MUSIC Understand and apply elements of music and understand how music communicates ideas, feelings, and experiences across cultures	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote	▪ Author and elaborate critiquing a musical selection or musical performance using Word ▪ Critique music using specific criteria with audio/video and digital ink in OneNote ▪ Develop interactive "book" describing how various elements and roles of music integrate with other content areas using PowerPoint's interactive, multimedia capabilities
DRAMA AND THEATRE Understand and apply the skills of acting, design, and technical theatre and understand the role of drama in various cultures throughout history	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote	▪ Evaluate how technology has impacted theatre production and present using PowerPoint's multimedia capacity ▪ Research technical theatre innovations using IE ▪ Create a dramatization based on a story using PowerPoint interactive, multimedia capabilities.

HCPS III FINE ARTS *Alignment Guide*	Aligned Tools	Examples
DANCE Understand and apply elements of dance, appreciate how dance communicates meaning, and recognize its role across cultures and throughout history	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote	▪ Use a variety of dance elements to develop dance phrases and annotate as needed using OneNote's digital inking, video/audio notes ▪ Evaluate a dance using personal preferences and personal knowledge of dance composition and impact using OneNote's synchronized audio/video notes and handwriting ▪ Evaluate a dance using personal preferences and personal knowledge of dance composition and impact using PowerPoint's multimedia features.

Table 22. HCPS III Physical Education.

HCPS III PHYSICAL EDUCATION *Alignment Guide*	Aligned Tools	Examples
MOVEMENT FORMS Use motor skills and movement patterns to perform a variety of physical activities	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote ▪ Excel	▪ Consistently participate in a variety of physical activities of personal interest to maintain an active lifestyle and capture video/audio notes that are included in OneNote digital portfolio ▪ Consistently use combinations of specialized movement form in a variety of activities

HCPS III PHYSICAL EDUCATION *Alignment Guide*	Aligned Tools	Examples
COGNITIVE CONCEPTS Explore and understand educational and career options in order to develop and implement personal, educational, and career goals	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote ▪ Excel	▪ Identify and explain how using a variety of strategies helps to improve performance of movement skills through research using IE and document using Word ▪ Compare offensive and defensive strategies for simple and modified activities through research conducted with medical and sports medicine websites, and present using multimedia capabilities in PowerPoint and analysis visualizations in Excel ▪ Develop interactive guide demonstrating strategies
ACTIVE LIFESTYLE Participate regularly in physical activity	▪ Windows ▪ Internet Explorer ▪ Word ▪ OneNote	▪ Explain how participating in physical activities leads to social and emotional benefits through Internet research and using Word

HCPS III PHYSICAL EDUCATION *Alignment Guide*	Aligned Tools	Examples
PHYSICAL FITNESS Know ways to achieve and maintain a health-enhancing level of physical fitness	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office	▪ Explain the physiological indicators that accompany different types of moderate to vigorous physical activities using PowerPoint ▪ Apply knowledge of the benefits of participation in selected physical activities on the components of health related physical fitness to solve a problem and document using Word with examples supported through web site research ▪ Consistently set goals to improve personal fitness level based on various sources of information and document in OneNote

Table 23. HCPS III World Language.

HCPS III WORLD LANGUAGE *Alignment Guide*	Aligned Tools	Examples
INTERPERSONAL Use target language to engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote	▪ Engage in conversations about likes, dislikes, and personal preferences, with ease and independence ▪ Exchange detailed information about self, other people, places, objects, activities, events, and other topics of interest using IM/Audio, Video Chat ▪ Exchange opinions and feelings about a variety of experiences and events, using simple phrases and expanded vocabulary and capture using OneNote's capture of audio/video notes

HCPS III WORLD LANGUAGE *Alignment Guide*	Aligned Tools	Examples
INTERPRETIVE Understand and interpret written and spoken language on diverse topics from diverse media	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Publisher ▪ Word ▪ PowerPoint ▪ OneNote ▪ Excel	▪ Identify the main ideas and significant details of familiar oral and written materials with visual cues with shared text in Word's Read Mode. Students work in groups to color code support for main idea ▪ Exchange opinions and feelings about a variety of experiences and events, using simple phrases and expanded vocabulary by creating self-portrait brochures created in Publisher and attached to grammatically correct email, which has been proofed using language tools ▪ Ask and answer transactional questions, using simple phrases and expanded vocabulary, to provide and obtain goods, services, or information in a variety of contexts during role play exercise with flip classroom activity, using video/audio chat
PRESENTATIONAL Present information, concepts, and ideas to an audience of listeners or readers on a variety of topics	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Publisher ▪ Word ▪ PowerPoint ▪ OneNote	▪ Use simple phrases and expanded vocabulary to make simple presentations on a variety of topics using Word and PowerPoint's Multilanguage features. Develop advertising using Publisher to demonstrate vocabulary diversity ▪ Use learned vocabulary and gestures to recite poems or stories, with ease and include in PowerPoint presentation to

HCPS III WORLD LANGUAGE *Alignment Guide*	Aligned Tools	Examples
		class or online using audio/video chat to classrooms in other countries ▪ Prepare written communication on a given theme, using simple phrases and expanded vocabulary for a variety of topics
CULTURES Understand relationships among perspectives, products, and practices of target culture	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote	▪ Compare tangible and intangible products and practices of the target culture to other cultures, in great detail ▪ Give thoughtful and detailed examples of how significant cultural ideas are reflected in the practices and products of the culture being studied
COMPARISONS Understand that different languages use different patterns to communicate and apply this knowledge to the target and native languages	▪ Windows ▪ Internet Explorer ▪ Microsoft Office 365 for Education ▪ Microsoft Office ▪ Word ▪ PowerPoint ▪ OneNote ▪ Excel	▪ Compare more complex grammatical and linguistic structures of target language with own language using SmartArt in Word. ▪ Compare basic grammatical and linguistic structures of target language with own language using Word's research and language settings. ▪ Apply tenses appropriately to express actions and state of being in the present, with accuracy recorded in student's OneNote portfolio

Table 24. The Proposed Microsoft Academic Platform Supporting Education Needs

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
World-class, familiar tools on tablets and devices:	**Cloud-based** professional email Video conferencing	Supporting students and teachers with	IT Academy- Supporting CTE Standards

Microsoft Office	Office 365 for Education	Windows & Internet Explorer	Additional & Optional Apps
•Access •Word •Excel •Lync •PowerPoint •Publisher •Outlook •OneNote	and IM **Web-based viewing and editing** using Office Web Apps Share files inside and outside school **Secure Student and Teacher Data** Your data belongs to you – Microsoft does not scan emails or documents for advertising purposes. Compliant with Industry Standards & leadership in transparency.	desktop power using tablet form factors. Beautiful, fast, and fluid experience that you can personalize with the people, applications, and sites you need. Accessibility, Security and Privacy Features. Internet Explorer starts and loads sites almost instantly. It brings a fluid responsiveness to the web that feels totally new. The web is a swipe, tap, or click away.	Education, Publisher and Content Provider Apps (such as those from Windows Store) Office Store and Apps Movie Maker & Photo Gallery: Video creation, editing and digital photo editing Microsoft Math 4.0-step by step graphing calculator supporting mathematics and science standards. Optional scientific tools from Microsoft Research.

Table 25. Summary of Compliant and Relevant Tools.

Summary of Compliant & Relevant Tools	Envisioned Use Examples
Access 2013 Basic and Advanced Database, Reporting, Design	Supporting Science, Technology and Mathematics CCSS, individual state requirements, Develop advanced data models, support analysis, capture data, develop reports, conduct analysis, Support computational thinking and synthesized knowledge and creativity with database functionality

Excel 2013 Basic and Advanced High Quality Computation, Analysis, Modeling, Spreadsheet, Collaboration, Communication	Supporting ELA CCSS, Science and Mathematics CCSS, individual state requirements, Develop and conduct fundamental and advanced data analysis; develop rich data visualizations; recognize patterns and support computational thinking with charts and real time data from websites. Support mathematics and science concepts using real world tools used by researchers and employers; supporting computational thinking activities, such as incorporating data, visualizations, and charts, support research and develop data to demonstrate evidence based & research texts; Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.
IT Academy, DreamSpark, Career Forward	Comprehensive CTE offering supporting technology readiness and certification initiatives with real world tools used by employers; e-learning and teacher resources, curriculum, and software
Lync IM/Audio/Video Chat/Desktop Sharing/Polls/ Online Whiteboards	Supports online collaboration, desktop and document sharing, recording online meetings for video playback, presence awareness, group and class distance learning, interview industry experts, invite students to work on Flipped Classroom activities after school, integrates with Microsoft Office Word, PowerPoint, Excel, OneNote and Outlook.
Microsoft Math 4.0 Basic and Advanced Mathematics Graphic Calculator, step by step equation solver	Mathematics CCSS, Science Standards, individual state requirements, Step-by-step problem solving, develop high quality 3D and 2D graphs, Support formula and triangle equations, support remediation of mathematics, support computational thinking and data analysis.
Office 365 for Education Cloud-based, Secure Communication & Collaboration, Productivity, Office Web Apps	Supporting ELA CCSS, Mathematics CCSS, individual state requirements, Online Cloud storage, email store, IM/Audio/Video communications; interactive distance learning, research and engagement with other cultures on line, video/audio, support learning needs across academic content areas and throughout desired grade levels.
OneNote 2013 Easy to Use Flexible Digital Notebook	Supporting ELA CCSS, Mathematics CCSS, individual state requirements, Capture video notes, audio notes, handwritten notes, record performances, speaking, narration, listening activities, develop writing examples, share and coauthor notes, capture digital inked notes, Review synchronized audio/video and notes.

Optional/ Additional 3rd party applications Available at the Windows and Office Store & Side Loaded Apps	Supporting ELA CCSS, Mathematics CCSS, individual state requirements, Additionally, no cost and low cost third party applications are also available to provide optional, added support for this requirement if desired. Add applications for Windows and Office to extend and customize; Add consumer, education and third party applications supporting possibilities for existing and new instructional tasks and workflows; IE Add-ons support third party website capabilities
Outlook 2013 Definitive email, Message & Calendars	Supporting ELA CCSS, Mathematics CCSS, individual state requirements, Manage email, calendars for student meetings; collaborate with teachers, students and researchers. Students can make edits and update content using the accompany Office Web Applications provided under Office 365 for Education.
PowerPoint 2013 Basic and Advanced High Quality, Interactive, multimedia Authoring, Collaboration, Communication, Personal Tablet, In Person, On Line Presentations	Supporting CCSS ELA, CCSS Mathematics, NGSS, across disciplines, content areas and grade levels and in support of ELA CCSS, Science and Mathematics CCSS, individual state requirements, Develop audience, online, and individual interactive multimedia texts and presentations, edit video and photos inside PowerPoint, Save to HD video, collaborate and co-author with students, researchers, and distant experts , presentations and publishing, present findings with appropriate language, vocabulary supporting listening and language activities. Students can make edits and update content using the accompany Office Web Applications provided under Office 365 for Education.
Publisher 2013 Basic and Advanced Content Publishing, Simplified Site Design, Creative Design	Supporting CCSS ELA, CCSS Mathematics, NGSS, and individual state requirements, Publisher allows students to transform text into fine typography projects for the screen or in print. Students use stylistic sets, and can use new Text Effects, Picture Effects, and even print out photos if needed using new Photo Center Printing.
Windows & IE Fluid, Fast Operating System supporting Touch, Keyboard, Mouse, with Access to sites students and teachers need.	Supporting CCSS ELA, CCSS Mathematics, NGSS, individual state education standards and requirements, accessibility, narration, speech recognition, built in snipping tool, calculator, equation input, handwriting input, screen keyboard use; Access publisher, content developer and education related content; Add applications for Windows and Office to extend and customize; Add consumer and third party applications and supporting possibilities for existing and new instructional tasks and workflows; Supporting IE website browsing, rich content research with websites, streaming, safety and security

Windows Live Movie Maker & Photo Gallery Digital image and movie creation and editing	Powerful, simple digital photo editing, import, edit and share digital photos. Quick, Fast movie creation, edit clips, audio, add effects, and share movies. Support creative and instructionally related digital images and movies for use in presentations and supporting textual evidence. Visually and audibly represent abstract and concrete, concepts; Incorporate across disciplines and content areas and grade levels.
Word 2013 Fundamental & Advanced High Quality Authoring, Text Development, Word Processing, Collaboration, Communication, Reading	Supporting ELA CCSS, Mathematics and Science CCSS, individual state requirements, multiple language support; built in translation tool, research tool, search tools, View texts and video playback inside Word. Co-author in real time; Open PDF files, edit and save. Edit photos inside Word, Search for Online video and photos inside Word, Receive Readability Statistics, and interactive grammatical and spelling feedback. Communicate research findings; Create literary, creative, technical, informational, research and other texts; Document findings, conclusions, and document synthesized knowledge and concepts; Manage citations, references, and generate Works Cited and Bibliography pages. Use during presentations and publishing supporting listening, language and communications tasks; Create high quality, evolve and elaborate text; read informational and literary texts. Students can make edits and update content using the accompany Office Web Apps provided under Office 365 for Education.

6.6.4. Network and Device Connectivity

The device must be able to connect to network file servers using common networking protocols (e.g., smb, afp, nfs, ftp, etc.). The device must be able to utilize common peripherals for input and output (e.g., networked and stand-alone printers, digital cameras, digital video cameras, scanners, etc).

Response:

The ElitePad 900 with Windows Professional will be able to connect to network file servers using smb, nfs and ftp. This connectivity is possible because Windows Professional supports these protocols natively. The ElitePad 900 with the expansion jacket will also be able to utilize common peripherals for input and output such as network and stand-alone printers, digital cameras, digital video cameras, scanners, etc., through USB or network connectivity options offered by the peripheral.

6.6.5. Distance and Online Learning

The portable computing device must be able support common learning management systems (i.e. Moodle, Blackboard, Studywiz, etc.) to facilitate distance and online learning. In addition, the portable computing device must be compatible with common online content providers (i.e. oercommons.org, cnx.org, khanacademy.org, ck12.org, iTunes U, etc.).

Response:

HP's proposed solution fully complies with this requirement. Devices capable of running Microsoft Windows Professional are able to support common learning management systems and common online content providers, including those listed within the requirements above.

6.6.6. Student Information Systems

The portable computing device must be compatible with common student information systems in use in schools and states.

Response:

HP's proposed solution fully complies with this requirement. Devices capable of running Microsoft Windows Professional are compatible with common student information systems such as PowerSchool, Infinite Campus, Skyward, and Milepost and more.

6.6.6.1. Maine Student Information Systems (SIS)

The Maine Department of Education utilizes Infinite Campus State Edition for management reporting purposes. In addition, Maine schools primarily utilize Infinite Campus and PowerSchool for local management and reporting purposes. Bidder's solutions must be compatible with Infinite Campus and PowerSchool systems, and Bidder's will be required to work with the Department to maintain compatibility as both the solution and the SIS systems evolve.

Response:

HP's proposed solution fully complies with this requirement. Devices capable of running Microsoft Windows Professional have interoperability with the listed application and tools and meet or exceed the minimum system requirements of all of the listed applications.

6.6.7. Stand-alone

The portable computing device must be able to function in a stand-alone mode sufficient to enable the user to perform basic functions (e.g., writing, data analysis, multimedia, information management) without requiring network access. The Bidder must describe the differences, if any, in the function of the device when it is network-connected versus in stand-alone mode. Bidders should consider that many families do not have broadband Internet access at home.

Response:

The ElitePad 900 is a fully functioning personal computer. It supports the Microsoft Windows Professional operating system, and is configured with dedicated components including system memory, hard drive, and wireless network connections. The ElitePad 900 can be used in a stand-alone mode to perform basic personal computing functions such as writing, file saving, and accessing multimedia without network access. When connected to the network, the ElitePad 900 will be able to access files and software located on a network share or locally on the portable computing device. When not connected to the network, the ElitePad 900 will only be able to access files and software stored locally on the portable computing device, but can re-synchronize to file shares or backups once they reconnect to the network.

The ElitePad 900 as proposed, includes Microsoft Office -365 A2 and Microsoft Education Desktop SKU - Part Number SKU 2UJ-00001 which allows for full off-line Microsoft Office functionality.

The Microsoft Education Desktop SKU - Part Number SKU 2UJ-00001 allows full offline capability and includes Microsoft Office Professional 2013:

- Word
- PowerPoint
- Excel
- Outlook with Business Contact Manager
- Lync
- OneNote
- Publisher
- Access
- InfoPath
- SharePoint Workspace

6.6.8. Cloud Requirements

The Bidder must include a recommended minimum school Internet bandwidth capacity for its solution. Recommended bandwidth should be expressed in megabits per second for each 100 users per school. This recommendation should assume that the entire school is participating in the program, and therefore all students may be leveraging the portable digital device. The Department recognizes that some general activities not specific to the solution can drive significant bandwidth usage, and recognizes that schools will need to install bandwidth necessary to support the density of users associated with a 1:1 program. However, if the Bidder's solution relies on cloud-based tools and functionality, the Department needs to understand what impact, if any, the introduction of the solution will have on school bandwidth needs. Bidders should design a solution that respects the availability of bandwidth in schools.

Response:

HP recognizes the recommended minimum school Internet bandwidth recommendations of the State Education Technology Directors' Association (SETDA) *Broadband Imperative* report (http://setda.org/web/guest/broadbandimperative). SETDA recommends the following:

Table 26. Broadband Access for Teaching, Learning and School Operations.

Broadband Access for Teaching, Learning and School Operations	2014-15 School Year Target	2017-18 School Year Target
An external Internet connection to the Internet service provider (ISP)	At least 100 Mbps per 1,000 students/staff	At least 1 Gbps per 1,000 students/staff
Internal wide area network (WAN) connections from the district to each school and among schools within the	At least 1 Gbps per 1,000 students/staff	At least 10 Gbps per 1,000 students/staff

Broadband Access for Teaching, Learning and School Operations	2014-15 School Year Target	2017-18 School Year Target
district		

(Excerpted from page 2 of the SETDA's Executive Summary, retrieved 1/2/13. Used with permission.)

The HP solution does rely on several cloud-based applications in order to deliver professional development, provide content for learning, device management and to provide storage space for students and teachers to store their content. We believe that SETDA's recommendations as stated above are more than sufficient to meet the needs for students and teachers participating in 1:1 programs supported through the MLTI contract.

6.6.8.1. Maine School and Library Network

For more information about available bandwidth in Maine schools, please see **Appendix E, State Profiles - Maine**.

Response:

HP has read and reviewed the information provided in the RFP, Appendix E, State Profiles – Maine.

6.6.9. Software Updating

The Provider should describe how its solution will provide the capacity to update the portable computing devices. This includes incremental and major updates that may be required after the portable computing devices have been issued to students. Increasingly, schools are issuing the portable computing devices to students, and the students are retaining the device even during long vacations including summer break. The Provider should describe whether or not it will be necessary for schools to collect the portable computing devices to apply major updates efficiently. The portable computing devices will be able to be updated from a central location via a "push" method or "over the air" method rather than each device separately and manually for incremental updates.

Ideally, major updates should not require users to perform a complete back and restore of user data and configurations in order to apply the update. While the Department recognizes that performing a backup before a major update is "best practice", it is desirable that the solution allow for "upgrades" whenever possible as opposed to "reformat and reinstall".

Response:

All machines deployed within this program will be managed and monitored using LabTech's remote monitoring and management solution. HP and its subcontractor, Dynamic Edge, will be responsible for deploying, supporting and maintaining this solution throughout the life of this contract. This solution continually monitors all managed machines and checks for relevant software updates which need to be applied to maintain security and reliability of the portable computing devices.

HP's design for this solution relies on participating State and district administration as well as and HP administrators who will be responsible for approving all patches and virus signature updates for deployment, and for configuring the bandwidth usage, download, installation scheduling and system reboot policies. OS and application Service Packs will be treated as major application deployments and as such will be planned in collaboration with the Technology Administrators.

No end user or local Technology Administrator intervention is required to enable any of this process for either minor or major updates. The management agent on each portable computing device will communicate in the background with the cloud-based service to identify updates for the local machine, download those updates (and any pre-requisite updates), apply them to the machine and then handle any reboot requirements. It will not be necessary for the district to collect portable computing devices to apply major updates as those are processed "over the air", but we do believe that it is best practice for the school or district to re-image the devices from the updated, base image each summer by using HP-provided USB drives.

To minimize Internet connectivity bandwidth utilization by this process, HP will work with the local education departments to provide options for USB and temporary local cache devices for large deployments.

6.6.10. Software Restore

The portable computing device will be able to be restored easily and in a reasonable timeframe. The Provider should take into account the range of sizes of schools and account for reasonable restore processes for both large and small school deployments. The Provider is responsible for providing any associated software, hardware, or networking equipment necessary to restore the device to a base state. In addition, the restore process should allow for easy additions to the base software load as schools may desire the additional software titles or adjustments to basic settings. Ideally, a device should be able to be restored, including local additions, easily so that upon completion of the process, no further manual installations or configuration changes are necessary.

Response:

As described earlier, local schools will be able to re-image any machine using either Network Boot Deployment or USB Drive Deployment (based on both the school's capability and preference). The sequence of steps required for such restoration is nearly identical simplifying the training for the local Technology Administrators.

Restoration of the device to the base state shall be accomplished by the local district technology resource using local media (provided by HP) and following a short list of steps provided by HP to the district IT resource. The LabTech solution will then re-apply the District OS image complete with all district customizations to the target machine. The time to complete this process is largely dependent on the size of the OS image, the number of applications installed over the OS and the speed of the network and portable computing device hard drive. A typical time to completion for a single portable computing device is expected to be around 30-45 minutes.

In a typical school scenario, USB drives will be provided containing the Master OS Image and District customizations. The USB drive is plugged into the target machine which is then booted

from that drive.
The LabTech solution will then re-apply the Base OS image and after promoting for the school location, will apply all relevant district customizations to the target machine. The time to complete this process is largely dependent on the size of the OS image, the number of applications installed over the OS and the speed of the USB and portable computing device hard drives. A typical time to completion for a single portable computing device is expected to be around 30-45 minutes, though this is also dependent on the speed of the USB drive (USB 3.0 will be used if supported by the portable computing device hardware configuration).

6.6.11. Operating System and Software

The Provider must include current and upgraded versions of the core operating system software and all other software included as a part of the Provider's solution through the term of the agreement in order to maintain usability with upgrades and enhancements to surrounding systems and peripherals. The Bidder must provide a device which will not require hardware upgrades in order to reasonably keep up with possible future software upgrades (e.g., initial delivery should include adequate memory, storage, and processing power for typical upgrade cycles given the term of the agreement) or the Provider should include a description of how it plans to upgrade the equipment through the life of the project to maintain adequate functionality and minimize disruption and the availability of the solution.

Response:

During the lifetime of the project it is anticipated that occasional upgrades to new versions of the Windows Operating System will be required. Such upgrades will be carried out and built into the annual base image during the annual review before the start of the next academic year. HP and its subcontractors will consult first with representatives from all Districts to identify the configuration requirements for the new Base OS image. Next each District will be consulted individually to identify any specific OS configuration needs for that District.

New master images would then be built and tested on representative hardware. All compatibility and operational tests would be completed and any fixes incorporated into the image, re-tested and documented.

Pilot deployments would then be completed using sample hardware to confirm that the images deploy correctly in all deployment scenarios (including manufacturing) and that the images operate correctly and are compatible with all hardware variants and bundled applications.

Hotfixes, updates, patches and Service Packs to each version of the OS will be deployed over the air.

For devices that do not come with Windows 8 as the standard OS, HP will provide a plan to upgrade to Windows 8 as adoption of Windows 8 is determined in the marketplace, HP will work with the State to develop upgrade plans and to determine additional training requirements included as part of our offering. HP will make a commercially reasonable effort to work with the state to develop images based upon subsequent generations of Windows OS as they become available and it is deemed appropriate and technically feasible by the State, HP and HP’s partners.

6.7. Device Options

The Department wishes to enable schools, who so desire, to enhance or complement the basic solution with additional, optional software and hardware at their own local costs. Each Bidder should describe what it can offer, separately priced, to enhance schools' effective use of the basic solution—strictly as an option for local school units to consider should the Bidder become the awarded Provider. Schools may also opt to acquire such offerings independently if they are able to obtain better pricing from other parties. The Bidder shall include only those products, models and features that it will support if configured and connected to the proposed solution.

The Bidder should specify and describe fully here the features, functions and advantages of such offerings. Provide the price quote on **Appendix B, Cost Proposal Form, Table 4** for each item, including all cost options (please use consistent item numbers in this section and on **Appendix B, Cost Proposal Form, Table 4**). Specify whether the price includes shipping, installation and related charges; if not, specify what additional charges would be added. Ensure that the total cost is represented.

The Bidder is to provide the manufacturer name, model, short description, warranty, unit and volume prices. Also, include any additional cables, connectors and adapters required. If any software upgrades or additional features are required, so state. These devices, cables, connectors and adapters must be available through the Bidder's corporation for delivery to the individual sites. The value of such offerings will not be considered in the evaluation score of the proposal.

Response:

HP's proposed solution complies with this requirement. Upon the request of the State Department of Education, HP shall provide participating MLTI districts and schools a webpage from which participating MLTI districts and schools may purchase additional optional hardware and software solutions that complement the overall MLTI program offering. These solutions shall be separately priced to enhance schools' effective use of the basic solution; HP shall provide this information strictly as an option for participating MLTI schools and districts to consider. MLTI schools and districts may opt to acquire such offerings independently if they are able to obtain better pricing from other parties. HP shall include only those products, models and features that shall be supported if configured and connected to the proposed solution in a manner specified by HP's proposed overall MLTI solution. These optional items, if selected, will not be part of any Lease Schedule described herein.

HP has a wide range of additional software and hardware offerings that the State may wish to consider as device options to complement the existing system proposal. HP has included a listing of optional items in Appendix B, Cost Proposal Form, Table 4.

HP will work with the State to identify a core list of hardware and software offerings that would provide the best set of additional, optional products, and which would significantly enhance the use of the basic system proposed. These additional offerings could include items such as extra memory, alternate input/output devices (keyboards and mice), additional power solutions (adapters and batteries), and other education-oriented products.

6.7.1. Optional Software

The vendor may provide students and teachers access to software and applications such as educational content, web-page development software, student information, assessment tools, data management, etc. Specify such offerings here.

Response:

HP has a broad range of software offerings that the State may wish to consider as a complement to the MLTI program. HP will work with the State to identify a core set of software offerings that would provide the ideal blend of core functionality along with effective teaching and learning opportunities. Specific offerings, part numbers, descriptions and unit cost information can be provided after the core set of software offerings is defined.

Reviewing Maine's Legacy Software

A first step to offering optional software is based on the list the State provided of existing applications used in the legacy MLTI program. The chart below identifies the category of software, whether or not the product is available in Windows format and, if not, what might be appropriate optional software to provide similar or more enhanced functionality.

Table 27. Legacy Software.

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
Business	JA Titan		Yes		http://titan.ja.org web based simulation games
Music	iTunes	10.5.3	Yes		
Music	Garageband	6.0.4	No	Adobe Audition, Cakewalk Sonar X2 or Cakewalk Music Creator 6.0 (low cost)	Music editing and recording software
Productivity	Address Book	5.0.3	No	Microsoft Outlook	Contact database, now called Contacts in Mountain Lion
Productivity	iCal	4.0.4	No	Microsoft Outlook	
Productivity	iChat	5.0.3	No	Microsoft Lync, Yahoo IM, Google Chat	

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
Productivity	Keynote	5.1.1	No	Microsoft PowerPoint	
Productivity	Mail	4.5	No	Microsoft Outlook or web-based email	
Productivity	OmniFocus	1.9.4	No	Microsoft Outlook, or Microsoft Project	
Productivity	OmniOutliner	3.10.3	No	Microsoft Excel	
Productivity	Pages	4.1	No	Microsoft Word	
Productivity	TextEdit	1.6	No	Microsoft Word	Simple text editing, Microsoft Word provides superior experience
Productivity	Write Room	2.5.2	No	Microsoft Word	Writeroom provides full screen writing environment. Just use Microsoft Word in full screen mode for same result
Reference	Encyclopedia Britannica	10	Yes		
Reference	Overdrive Media Console	1.1	Yes		www.overdrive.com
Reference	OmniDictionary	2.0.4	No	www.dictionary.com	
Web sites offer same functionality					
Simulation	Wolfquest		Yes		www.wolfquest.org
STEM	Data Studio	2012	Yes		PASCO stopped producing DataStudio software and migrated to

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
					PASCO Capstone, all their programs run in Windows environment (www.pasco.com/datastudio)
STEM	Geogebra	4.0.21	Yes		
STEM	Google Earth	6.2.0.590.5	Yes		
STEM	Grapher	2.1	Yes		Advanced Grapher 2.1 for Windows from Alentum Software
STEM	Logger Pro	3.8.4.2	Yes		Data recording tool from Venier
STEM	Maine Explorer	1.0.3	Yes		www.simbio.com
STEM	SketchUp Pro	8.0.11751	Yes		www.sketchup.com
STEM	Geniquest		Unknown		Created by Center for Genome Dynamics specifically for Maine's old laptop program
STEM	Calculator	4.5.3	No	Graphing Calculator 3D by Runitor	free 3D software, provides common calculator GUI interface, no training needed
STEM	Omni GraphSketcher	1.2.1	No	Graphing Calculator 3D by Runitor	Free 3D software, provides common calculator GUI interface, no training needed
Utility	Cyberduck	4.2.1	Yes		www.cyberduck.ch instant FTP tool
Utility	Democracy	1	Yes		Now called Miro, free software
Utility	1 to 1 Back Up	3.2	Unable to find	PC Backup	Dozens of backup software titles to

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
					choose from
Utility	ClamXav	2.2.2	No	Microsofft Security Essentials	Free Virus checking software, minimal technical training needed, Microsoft is also free and provides assistance is device gets infected
Utility	DVD Player	5.4	No	Choice of many free DVD player applications	No training required
Utility	Mac OS X	10.6.8	No	Microsoft Windows 7 or 8	
Utility	Time Machine	1.1	No	PC Backup	Dozens of backup software titles to choose from
Utility	VoiceOver	3.5	No	Microsoft Narrator built into Windows	
Utility	iSync	3.1.2	N/A		iSync was removed from Mac OS X starting with version 10.7
Visual	Acrobat Reader	10.1.2	Yes		
Visual	Adobe Digital Editions	1.8.1	Yes		
Visual	Comic Life	1.54	Yes		www.comiclife.com
Visual	ProfCast	2.6.5	Yes		www.profcast.com
Visual	QuickTime Player X	10	Yes		
Visual	Scratch	1.4	Yes		http://scratch.mit.edu
Visual	Photo Booth	3.0.3	Unable to find	Spark Booth	Photo booth kiosk software www.sparkbooth.co

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
					m
Visual	Acorn	3.2	No	Adobe Photoshop Elements or Photoshop.com	Image editing software, costs $49.99 www.flyingmeat.com/acorn
Visual	iDVD	7.1.2	No	Adobe Premiere Elements	
Visual	iMovie	9.0.4	No	Adobe Premiere Elements or freeware like EZVid	
Visual	iPhoto	9.2.1	No	Adobe Photoshop Elements or Photoshop.com	
Visual	OmniDazzle	1.1.1	No	Adobe After Effects or freeware like Easy Green Screen	screen effects (www.photoshopgreenscreen.com)
Visual	OmniGraffle	5.3.6	No	Diagraming functions found in Microsoft Word and PowerPoint	
Visual	Preview	5.0.3	No	Adobe Acrobat	
Visual	Perian	1.2.3	N/A		www.perian.org - site indicates they have ceased operations
Web	Firefox	3.6.13	Yes		
Web	iWeb	3.0.4	No	Microsoft Expression Web	
Web	OmniWeb	5.11.1	No	Microsoft	

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
				Internet Explorer, Google Chrome	
Web	Safari	5.1.3	No	Microsoft Internet Explorer, Google Chrome	
Unknown	Zon		unable to find		

To that end, we have found that a large percentage of software currently used can also be found in Windows format, while a small percentage can be replaced with fewer, more efficient choices. In the event the MLTI program wishes to maintain a similar list of applications, the optional software items the State may wish to consider are:

Table 28. Optional Software.

Category	Software Title	Description	Fee/Free
Visual	Adobe Photoshop Elements	Adobe Photoshop Elements 11 helps you edit pictures with powerful, easy-to-use options and share them via print, the web, Facebook, and more. Live in the moment knowing you can easily turn your everyday snapshots into sensational photos. Geo-tagging functionality allows teachers and students to view photos on a map based on where the images were taken, as well as leverage people recognition tools to organize photos and video c lips in one convenient place.	Fee-based
	Adobe Premiere Elements	Adobe Premiere Elements 11 software helps you edit video using smart, automated options, enhance your movies with pro-quality effects, and then share on virtually any screen. Live in the moment knowing that you can easily turn	Fee-based

Category	Software Title	Description	Fee/Free
		creation software.	
	Adobe Acrobat Professional	With new Adobe Acrobat XI Pro, learning is more engaging. Organize coursework and assignments in media-rich PDF Portfolios. Improve collaboration and security using powerful commenting tools and password protection. • **Create rich documents and portfolios** - Easily bring together documents, spreadsheets, presentations, web pages, videos, photos, and more in a polished PDF file or PDF Portfolio. • **Collaborate more effectively** - Use enhanced commenting tools to easily annotate and collaborate on everything from curriculums and lesson plans to policy reports and grants. • **Protect institutional information** - Make your school's operations more secure by adding passwords to sensitive files, like student and employee records, grant proposals, and research pages.	Fee-Based (Acrobat Reader is free)
Music	Adobe Audition CS6	Adobe® Audition® CS6 software offers high-performance, intuitive tools for audio editing, mixing, restoration, and effects. Powerful new features such as real-time clip stretching, automatic speech alignment, and control surface support help you deliver projects faster than ever. Produce top-quality audio for film, broadcast, games, and other projects more efficiently with smooth Adobe Premiere Pro roundtrip editing and easy project exchange with other NLEs and DAWs.	Fee-based
	Microsoft SongSmith	A free application from Microsoft's Partners in Learning program, Songsmith generates musical accompaniment to match a singer's voice. Just choose a musical style, sing into your PC's microphone, and Songsmith will create backing music for you.	Free

Category	Software Title	Description	Fee/Free
		Songsmith is a great way to encourage students to be creative: many music teachers know that sometimes just helping kids "find their spark" is the hardest part of stimulating musical creativity. Furthermore, Songsmith can help you teach musical concepts that are sometimes difficult, particularly how chords are used in pop music and how melodies and chords fit together. Using tools like Songsmith to explore these concepts can help connect what students are learning in music class to the music they listen to at home, whether they're in third grade or in high school. Even outside of music classes, Songsmith is a great way to encourage creative approaches to learning. We've heard from teachers who had students write songs about science concepts, and we've heard from parents whose children used Songsmith to memorize their multiplication tables. Songsmith can be reviewed and downloaded for free at http://research.microsoft.com/en-us/um/redmond/projects/songsmith/index.html	
Web	Microsoft Expression Web	Microsoft offers more basic and advanced options for web design and development. More advanced web design tools are offered through Microsoft Visual Studio. Based on the software previously used by the MLTI, Microsoft's Expression Web offers a similar set of functionality as is currently a free download. Create compelling Web sites visually. If you think and create visually, use the state-of-the-art design surface to layout your Web page. You can make design decisions on the fly, knowing that you're seeing a faithful representation of the final browser-rendered page. Drag and drop controls simplify adding rich media, such as Silverlight from Microsoft Expression Blend, Silverlight video, Adobe Flash, and Windows Media. And advanced	Free

Category	Software Title	Description	Fee/Free
		Adobe Photoshop file import gives you complete control over imported layers and transparency. Expression Web and Expression Design can be downloaded for free at http://www.microsoft.com/expression/	
Security	Microsoft Security Essentials	Use Microsoft Security Essentials to help guard against viruses, spyware, and other malicious software. It provides real-time protection for your PCs and can be downloaded at http://windows.microsoft.com/en-US/windows/security-essentials-download Microsoft Security Essentials is free* and we designed it to be simple to install and easy to use. It runs quietly and efficiently in the background so you don't have to worry about interruptions or making updates. • Comprehensive malware protection • Available in 33 languages • Simple, free download • Protects you quietly in the background • Automatic updates	Free
	Absolute CompuTrace	Absolute Computrace allows organizations to centrally track and secure all of their endpoints within a single cloud-based console. Computers and ultra-portable devices can be remotely managed and secured to ensure – and most importantly prove – that endpoint IT compliance processes are properly implemented and enforced. Computrace is used by hundreds of schools across the nation to centrally track, locate, and secure IT assets within a single cloud-based console. Asset inventory cycles are reduced from days to minutes. Alerts are sent as soon as suspicious behavior is detected. And you don't need to spend additional budget on replacement computers because stolen devices	Fee-based

Category	Software Title	Description	Fee/Free
		are recovered with a guarantee. Additional details may be found at http://www.absolute.com/solutions/K12education	
Productivity	HP Classroom Manager	HP Classroom Manager allows you to make teaching more effective for your faculty and learning more exciting for your students. This powerful educational software is part of the HP Digital Learning Suite—a comprehensive solution that allows for collaboration of classroom technology to create a more interactive and cost-effective learning environment. Teachers are empowered to… • Monitor student activity and progress • Create interactive lesson plans with hared content • Communicate with any student without interrupting the class flow • Easily apply basic and advanced features to create an engaging learning environment • Administer real-time quizzes, tests, or surveys and view student progress in case assistance is needed • Share any desktop with students or the entire class • Control printers, keyboards, monitors, USB drives, or other connected devices	Fee-based
	Absolute Manage	Absolute Manage for endpoint management maintains the health of each device in your school technology environment. Supports all of your common operating systems and devices within a single console. Prevent the spread of viruses and forbidden applications. Use every software license and mobile application before you buy more. And redirect the money you save from implementing Power Management	Fee-based

Category	Software Title	Description	Fee/Free
		policies to more meaningful school initiatives.	

6.7.1.1. Maine Proficiency- and Standards-based Education Models

Maine is a leading state in the implementation of using national standards and industry recognized credentialing exams as assessments. The national and state certified standards currently in use can be found at http://www.maine.gov/education/it/resource_directory.shtml.These standards are our CTE's programs' benchmarks. Twenty-four Maine school districts have formed the Maine Cohort for Customized Learning (http://mainecustomizedlearning.org) which seeks to support the implementation of performance-based learner-centered educational systems. Further, Maine recently enacted LD1422, "An Act to Prepare Maine People for the Future Economy" (http://www.mainelegislature.org/legis/bills/display_ps.asp?LD=1422&snum=125). It calls for the implementation of proficiency-based diplomas beginning in January, 2017.

The Department is interested in solutions that will support the implementation of a performance/proficiency-based, standards-based system of education. This system would allow students and teachers to track, measure and produce reports based on student-centered project completions and instructor-led activities. The system would need to be able to track data at multiple levels (duty, task, indicator), provide progress indicators at different intervals and be cross-walked between Maine's *Learning Results* including the *Common Core State Standards* and anticipated *Next Generation Science Standards*, and Maine selected CTE national and state certified Standards and Assessments. The system should allow for data integration with assessment systems including the Smarter Balanced Assessment Consortia assessment system, Northwest Education Assessment tool, and others. In addition, ideally the system would provide alignment between student learning needs based on performance data and measures and applicable content and resources that may be available both at cost or for free (i.e. Open Educational Resources).

Response:

Learning and the successful achievement of Common Core Standards is reliant upon true personalized learning – not merely differentiated learning – for every child. As such, a learning management system to record, track and analyze student performance data requires a thorough amount of understanding from all educators and school/state officials.

While there are several applications that can deliver this – either fee-based or using a customizable open-source equivalent, HP would prefer to work with the State in developing the core functionality and goals, and jointly analyze those systems so the recommendation can be objective and in the best interest for Maine's educational stakeholders.

6.7.2. Optional Hardware

The vendor may provide students and teachers access to other hardware components, such as alternate portable computing devices, printers, servers, wireless access points, batteries, power cords, projectors, assistive devices, or other optional hardware devices. Specify such offerings here.

Response:

HP has a broad range of hardware offerings that the State may wish to consider as a complement to the existing teacher and student systems. HP will work with the State to identify a core set of hardware offerings that would provide the best mix of additional, optional products, and which would significantly enhance the use of the teacher and student systems proposed. These additional offerings could include (but are not limited to) items such as alternate input/output devices (keyboards and mice), additional power solutions (adapters, power cords and batteries), printers, servers, wireless access points, projectors, software and educational applications. Specific offerings, part numbers, descriptions and unit cost information can be provided after the core set of hardware offerings is defined.

Please refer to Appendix B, Cost Proposal Form, Table 4.

6.8. Pricing Schedules for Additional Educational Groups

The Department of Education wishes to extend the opportunity to purchase, at their own expense, the Bidder's solution, at the same or nearly the same cost to other educational providers such as public and private K12 schools, teacher preparation programs, home-schooled students, or public libraries. This will allow school systems to extend the program beyond the Department supported program. The Bidder should provide a pricing schedule to be utilized if such groups or individuals are authorized by the Department and if they wish to purchase the device, software and support solution provided under the agreement with the Department.

Response:

HP has provided optional pricing response to cover additional buildings and devices, which includes K-8 students. In addition, HP has a wide range of additional software and hardware offerings that State of Maine or other NASPO participant-funded K-12 educational providers may wish to consider as device options to complement the existing system proposal. These optional items are in Appendix B, Cost Proposal Form, Table 4. HP would be happy to discuss expanding our proposal in greater detail if awarded this project.

HP welcomes the opportunity for local educational stakeholders to participate in the technology initiative. HP offers to the general U.S. education community a private online shopping portal at www.hpdirect.com/academy where educators, parents and students can register and receive academic pricing at a substantial discount above what they would find at local retail outlets for HP computers, printers, software and accessories. Prevailing academic pricing is offered on that site and is updated frequently to provide cost competitive pricing throughout the year.

6.8.1. Maine K-6 schools

Maine schools serving grades K-6 are increasingly deploying 1:1 computing programs similar to the MLTI 7-12 program. Historically, the Department has extended the opportunity to purchase the MLTI solution to K-6 schools, at their expense, but through the Department's Agreement

(see **Section 5 Participation by Schools**). The Department is interested in continuing this opportunity for Maine's K-6 schools and also recognizes that other States that may participate in this program are seeking to support these grade-levels. Additionally, the Department recognizes that the device, tools and functionality described in **Sections 6.5 and 6.6** may or may not be applicable to younger students.

The Department wishes to make available to K-6 schools a solution that mimics the solution as described in this RFP for grades 7-12 in as many places as possible but that may vary to take into account developmental differences and be more age-appropriate.

Ideally, aspects of the solution that are systemic and not specific to the individual student or teacher would be identical or nearly identical such as **Section 7 through Section 12**. Bidders should recognize that many Maine schools are K-8 or even K-12. Therefore, differences in service levels or service protocols may cause confusion. Bidders must describe how its solution would be different for schools serving grades K-6. For example, the solution may leverage the same device but with a different collection of software tools; the solution may leverage a completely different device and therefore different tools; or the solution may be identical in all aspects. Bidders should consider whether multiple variations are necessary to best serve the developmental needs of students ranging from kindergarten to grade 6. Bidders must also list and acknowledge which aspects of their bid proposal would be identical for the K-6 solution as compared to its proposed 7-12 solution.

Response:

HP believes that standardization is essential to providing schools with consistent and reliable service for their technology initiative. Maintaining disparate hardware, operating systems and applications can often extend the down-time for repairs and support, negatively impacting instructional time.

The hardware and core software being recommended in this RFP is instructionally sound for grades K-12. While we may have recommended a device with different form factor size, user input or processing ability based upon the users' needs, the bid specifications prevent HP from including other hardware choices in this response.

For K-6 solutions, the HP ProBook 4440s offers an extremely cost effective solution. Please refer to HP's Proposal response for ProBook 4440s.

6.8.2. Maine Pre-service Teachers and Higher Education

The majority of Maine's teachers graduate from Maine public and private higher education institutions. In order to help prepare these teachers to teach in a MLTI school, the Department believes that these pre-service teachers should have access to and should learn to leverage the MLTI solution. Integration of the MLTI solution and the changes in classroom practices empowered by the solution into the higher education curricula is critical to the development of new teachers as well as the innovation of classroom practices. Additionally, in-service teachers continue to complete courses at Maine higher education institutions to maintain their teacher certifications, and the Department believes that a deeper integration of the MLTI solution into these institutions will better serve in-service teachers as well. The Department recognizes that there are significant differences in how higher education institutions provide infrastructure and support, and how higher education students typically procure personal computing devices.

Bidders must describe its plan to allow higher education institution teacher preparation programs in Maine to participate in the MLTI and provide devices and necessary services to the institution and pre-service teachers. Bidders must identify which aspects, if any, of its solution would not be available to Maine higher education institutions and pre-service teacher candidates. In addition, Bidders must propose how it intends to structure any financial arrangements including potential leases, invoicing, etc.

Response:

HP has been honored to support the student computing needs across many public and private higher education institutions and administrations across the U.S. By complementing the device with world-class service and support options, students and faculty are able to have a superior computing experience. HP extends this offer to pre-service teachers and private higher education institutions which qualify to participate under the NASPO cooperative contract.

HP offers to the general U.S. education community a private online shopping portal at www.hpdirect.com/academy where educators, parents and students can register and receive academic pricing at a substantial discount above what they would find at local retail outlets for HP computers, printers, software and accessories. Prevailing academic pricing is offered on that site and is updated frequently to provide cost competitive pricing throughout the year.

We have proposed a variety of financial arrangement options in our response to RFP Appendix D, NASPO Standard Terms and Conditions.

7. Network Connectivity and Infrastructure

The wireless network infrastructure shall connect from the portable computing devices at one end to the school's Internet gateway at the other end. Between the two ends, the Provider's solution must include switches and/or controllers as needed, the placement of wireless access points, server capacity for applications/files (as appropriate), and any other components necessary to complete the solution. In order to minimize the necessity to perform local electrical upgrades, Power-over-Ethernet is preferred. A Provider will be responsible for the design, installation, configuration, and on-going maintenance and support of the wireless network infrastructure for the term of the Agreement. Bidders must complete the **Wireless Local Area Network (WLAN) Specifications Summary** included in **Appendix G – Additional Forms**.

Response:

HP's partner ENA is uniquely positioned to be able to provide both seamless interoperability and connectivity for portable computing device users. ENA's service will provide a managed wireless infrastructure within the framework of each location where students with MLTI devices attend class. We are confident that this approach will result in a more robust overall solution with a single entity responsible for end-to-end connectivity for portable computing devices and, ultimately, the success of the program. With HP, through our partner ENA, as the managed wireless infrastructure provider, we will be able to pro-actively analyze and troubleshoot issues which may range from local interference of radio frequency (RF) signal strength.

HP, through our partner ENA, will provide a completely separate, fully monitored wired LAN per facility including PoE switches to the access points and end-to-end network connectivity between the wireless clients and each state, or to the school's WAN demarcation point and is designed to fully and seamlessly interoperate with the proposed portable computing device from

HP. All required cabling/wiring and hardware is included. The solution is designed to minimize necessary costs of building preparation; however, each school district will be required to ensure minimum building readiness prior to the installation. The proposed solution for the portable computing project includes all wireless access points, power over Ethernet (PoE) switches, controller hardware and software, cabling, and implementation and support resources necessary to deliver seamless end-to-end connectivity service for students and their teachers.

7.1. Building Readiness

Each local school unit that opts to participate in this program shall be responsible to ensure minimum building readiness for the installation of the bid solution. The local school unit shall address structural issues, construction/renovation, abatement, and electrical wiring needs, based on specifications supplied by the Provider. The bid solution should be designed to minimize necessary costs of building preparation.

Response:

HP and ENA have read and understood this section. Through our approach, we minimize building preparation costs by using existing cabling and wiring closets as possible.

7.1.1. Maine - Existing MLTI Wireless Networks

Existing MLTI network devices (wireless access points, switches, controllers), and infrastructure (cabling, patch panels) may be utilized by the Provider's solution at the Provider's choice. If a Provider's solution includes existing MLTI network devices or infrastructure, the Provider must agree to provide full warranty/performance coverage as it would with newly installed devices or infrastructure. The in-school infrastructure shall be accessible wirelessly and remotely. For more information about the existing MLTI wireless infrastructure, please see **Appendix E, State Profiles - Maine**.

Response:

HP and ENA will evaluate the condition of the infrastructure and endeavor to use it with our wireless solution. We do not plan to leverage existing network devices as it is our understanding that all current wireless access points, switches and controllers are nearing or have reached end-of-sale and will certainly reach end-of-life during the term of this contract. We intend to deploy entirely new network devices as part of our deployment of portable computing devices.

HP and ENA will provide full warranty and performance coverage of our installed devices and any of the existing infrastructure (cabling and patch panels) that we use in our deployed solution.

All in-school infrastructure will be accessible wirelessly and remotely for both the deployed portable computing devices as well as for our service center to manage and monitor our wireless solution.

7.1.2. Hawaii - Existing Wireless Networks

Hawaii has a separate plan for wireless networks and does not anticipate requiring any services for this. Deployment of devices will be decided based on the readiness level of the wireless infrastructure inside of schools. Please **see Appendix E, State Profiles - Hawaii** for more details on Hawaii's infrastructure readiness.

Response:

HP and ENA have read and understand. We will configure the portable computing devices to interoperate with the existing Hawaii network infrastructure and will rely on existing Hawaii resources to manage and troubleshoot the physical wireless network infrastructure and service.

7.2. Local Network and Access

These network access services will include as a minimum:

7.2.1. Wireless Coverage

The coverage must ensure that all necessary instructional and administrative areas can function wirelessly. Students and teachers will remain connected to the school's wireless LAN as they move around within the various rooms and areas. The Provider will ensure access to the school's wireless network from all instructional areas as well as core administrative areas including academic classrooms for all content areas, frequently used study areas, media centers, assembly spaces, library, performance theater, and administrative offices. To the extent necessary, a site survey should be performed to optimize each school's coverage area. A school may expand the coverage area at its own expense using the Provider's optional equipment offering or another available vendor.

Response:

Our implementation will ensure more than sufficient capacity and coverage to enable all instructional and administrative areas to function wirelessly. Students and teachers will be able to seamlessly roam from access point to access point (AP) without needing to re-authenticate as they move among the various rooms and areas of the school building. Coverage for portable computing devices will include access to all primary high school instructional areas, core administrative areas, academic classrooms, frequently used study areas, media centers, assembly spaces, library and administrative offices.

Upon award, site surveys will be performed at each school within scope to optimize each school's coverage area.

Each school will have the ability to expand the coverage area beyond the coverage provided through the project at its own expense. The cost for this is detailed in our cost proposal in Appendix B, Cost Proposal Form, Table 4.

The pricing submitted does not include moving equipment after it has been installed, to another location. HP understands over the life of this program, the State and individual school districts will be opening new schools and expanding or upgrading existing facilities which may require the removal and re-installation of equipment that is already under lease. This work is not covered in the pricing provided in this proposal. HP will work with the State to provide per event pricing for these activities and will work with the State to provide these services.

7.2.2. Wireless Access

Each participating school will be provided with a wireless connection. The Provider will be responsible for deploying switches and/or controllers, sized for the school's needs, that connect the buildings router and wireless access points. The portable computing devices will access the wireless LAN including network, switch, servers, access points, and associated hardware to provide a robust network environment for the student and teacher devices. This includes access from the school environment via the wireless network and any provided servers and the services it provides, including access to shared applications and files. Any proposed servers the Bidder may propose should include a description of where the servers will be located.

The Provider is responsible for all associated costs and services necessary to incorporate any proposed servers into the Provider's solution. Additional access points, wiring, electrical and equipment (if necessary) will also be provided as a local school option. Each Bidder must describe its solution's capabilities as well as its limitations (e.g., interference susceptibility, distance, spatial streams and object penetration), including what wireless industry standards (e.g., 802.11g, 802.11n, 802.11ac, etc.) are employed in the solution.

Response:

As stated above, all required wireless access points, PoE switches, sized for each school's need, controller hardware and software and cabling will be supplied to fully support the proposed wireless solution and will enable access to the school environment via the wireless network and its services, including access to shared applications and files. HP's, through our partner ENA, proposed solution incorporates resilient network-based controllers and is therefore designed to minimize the requirement for premise-based controllers and servers.

- Full support for all IEEE Wireless over Ethernet standards, including legacy 802.11a/b/g as well as the most recent standard, 802.11n. Upon formal standardization, we will review 802.11ac for potential inclusion.
- 2.4 and 5 GHz coverage for all areas
- Adaptive radio band management technology that will automatically place connected wireless clients on the spectrum and channel that most optimizes performance and mitigates RF interference
- Seamless roaming between APs in the same school and seamless and automatic connectivity when a device is moved from one school to another in the same district
- IP address management and delivery (DHCP) services for all wireless devices
- Routing and security configuration to enable wireless clients to reach appropriate local resources, including printers
- WEP, WPA, and WPA2 encryption options for all network traffic between the client and the AP, as well as SSL encryption of all management traffic between the APs and the controllers
- Certificate-based as well as optional integrated directory (LDAP/Active Directory) authentication for wireless users
- On-line interface for authorized school district personnel to view appropriate Wi-Fi utilization statistics for their specific district, and otherwise view and manage their district Wi-Fi implementation.
- Sophisticated wireless policy management that will enable ENA to provide variable wireless bandwidth and access control to different users not only based on their authenticated username but also their device type (in order to provide support for local devices but also prioritize access for portable computing devices)
- Optional rogue AP detection and neutralization
- Fault tolerant architecture that will automatically recover in the event that a local access point fails by appropriately increasing RF spectrum strength of the adjacent APs in order to provide seamless coverage
- Round-the-clock network monitoring and support
- Quickly scalable design that will allow for wireless coverage growth as schools expand, desire coverage beyond the high school instruction areas or implement new computing initiatives

Each school will have the ability to expand the coverage area beyond the coverage provided through the funded project at its own expense. Pricing for this option is detailed in our cost proposal in Appendix B, Cost Proposal Form, Table 4.

Optional rogue access point (AP) detection and neutralization provides the ability for ENA to identify non-authorized Wi-Fi access points within the school or campus setting and actively prevent any MLTI device from attaching to the networks broadcast by the rogue access point. This service requires careful calibration and consultation with the local district staff to ensure that rogue APs are properly detected, but that legitimate, though non-MLTI-related, Wi-Fi networks are not affected. Pricing for this option is detailed in our cost proposal in Appendix B, Cost Proposal Form, Table 4.

7.2.3. Wireless Bandwidth

For the wireless solution to be effective, sufficient and necessary bandwidth must be included. The solution must not only include sufficient aggregate bandwidth but must also be capable of being customized for varying needs within a school. Bidders must describe its strategy for providing sufficient bandwidth in a school environment, including how it intends to support the densities represented by classrooms of students, and the roaming nature of students (i.e. students change locations throughout the day). Each Bidder must specify and describe the capability and flexibility of its solution. The Bidder's solution should recognize that devices in addition to those provided through the Bidder's solution (e.g. smart phones, wireless printers, other computing devices) will also connect to the wireless network. Bidders will address how its solution provides adequate throughput (i.e. MIMO, dynamic frequency selection (DFS), dynamic channel allocation (DCA), spatial streams, etc.) to the solution in a mixed (i.e. 802.11b, 802.11g, 802.11n, 802.11a, 802.11ac, etc.) environment. It is expected that the Bidder's solution will represent the majority of wireless clients, but not the only clients.

Response:

HP's, through our partner ENA, proposed wireless implementation will support the latest IEEE 802.11 a/b/g/n standards for extremely high aggregate and individual wireless client throughput. As a standard, we plan to use dual radio MIMO access points that support up to 300 Mbps data rate throughput to any one individual MLTI portable computing device (which will be equipped with dual band radios themselves), and up to 600 Mpbs aggregate bandwidth. However, our managed wireless service is designed to be very flexible, so in the event a school has a high concentration of users in a specific area, or a subset of users that require very high individual wireless bandwidth, we can install even higher capacity access points that will be able to support 900 Mbps total aggregate bandwidth per AP, and up to 450 Mbps to an individual client. Or we can add additional APs, as required, to ensure we have deployed a robust infrastructure that fully support the instructional needs of the school in question and its students.

- Fifty (50) concurrent guest accounts for non-MLTI devices to access the ENA/HP wireless network deployed in each school. For larger MLTI device deployments, ENA/HP will provide an additional guest account for every 3 MLTI devices deployed beyond 150.

7.2.3.1. Wireless Usage

The Department anticipates that usage of the network will increase throughout the course of the Agreement as teachers and students integrate the solution into daily curricula and tasks. In addition, the nature of the usage may change over time as Internet technologies evolve and/or usage patterns change. While the Department cannot predict those changes, Bidders must describe how its solution will accommodate known network usage patterns including cloud-based services, video streaming including multi-cast sessions, and other bandwidth intensive tasks. If the Bidder's solution requires Bluetooth connectivity (e.g. keyboard connectivity to a tablet-style device), the Bidder must describe what, if any, impact on the wireless network this would have.

Response:

ENA, like the MLTI, anticipates that network utilization will grow significantly throughout the course of the Agreement. As an integral component of the ENA managed wireless service, ENA monitors both the real-time and aggregate bandwidth utilized per device as well as per school. ENA provides this information to local technology staff through a variety of reports to help local institutions ensure that their connectivity to the Internet is adequate to support the ongoing usage patterns of their local wireless users. In addition, ENA works with local technology staff to implement best practice wireless networking that can prioritize network access for specific applications, such as cloud-based educational curricula and testing sites. ENA can also prioritize traffic based on user role and local user directory membership. For example, ENA can prioritize a teacher's traffic over student traffic in a classroom. ENA also includes specific Wi-Fi radio optimization techniques as part of the ENA managed wireless service. These optimizations are based on our significant experience working with schools and libraries, and are designed to accelerate the delivery of multi-cast traffic to wireless clients.

7.2.4. Internet Access

Access to the Internet for schools is to be provided via each school's connection to its ISP. The Provider will ensure its solution works with the school's connection, and the Provider will work with each school's ISP to identify appropriate bandwidth and network infrastructure as needed. Internet content filtering, such as required by C.I.P.A. federal law, will be the ISP's and the local school's responsibility, not the Provider's. The Provider shall, to the extent feasible, consult and advise on the availability of cost effective measures for Internet content filtering.

Response:

HP and ENA understand that content filtering will be required for the devices deployed as part of the MLTI project. We will work with each school's ISP to identify appropriate bandwidth and network infrastructure as needed. We understand that we are not responsible for providing content filtering but agree to assist to the extent requested and possible to support the school and ISP's filtering solution.

7.2.4.1. Maine Internet Access

Most Maine schools are connected to the Internet through the Maine School and Library Network operated by Networkmaine. At the minimum, MSLN provides a 10Mbps connection to the MSLN with maximum connections of 1Gbps in some locations. Bidders must identify Maine school locations it believes will require an increase in available bandwidth and how much of an increase in order to successfully leverage the proposed solution. For more information about the MSLN, please see **Appendix E, State Profiles - Maine**.

Response:

HP and ENA propose that Maine review the SETDA recommendations for network access as referenced in section 6.6.8 of this response. We believe that the State of Maine should work diligently to obtain the funding and ensure that leadership is focused on reaching the goals stated in the SETDA report in order to ensure that all locations have adequate bandwidth to successfully leverage the proposed solution over the long term. During our site walk-outs as well as during the operation of our solution, we will work with the State of Maine and individual school districts to identify any schools that need additional connectivity after award and an evaluation of actual service use. We do not have enough information about the utilization of the current Networkmaine connectivity at each site in order to identify or evaluate where the levels of connectivity are sufficient for the student population, however our proposed solution does not uniquely require any more bandwidth than any other responded to this RFP.

7.2.4.2. Hawaii Internet Access

Most Hawaii schools are connected to the Internet through the Hawaii Department of Education's primary Internet Service gateway at its main administration building in downtown Honolulu. The Hawaii Department of Education provides a 2 gigabit connection to the Internet, which is distributed to schools via a fiber network throughout the state. Parts of this network are under construction and some schools will be using cable modems to access our internal network until construction is complete. Bidders must identify Hawaii school locations it believes will require an increase in available bandwidth and how much of an increase in order to successfully leverage the proposed solution. For more information about the Hawaii Network, please see **Appendix E, State Profiles - Hawaii**.

Response:

HP and ENA propose that Hawaii review the SETDA recommendations for network access as referenced in section 6.6.8 of this response. We believe that the State of Hawaii should work diligently to obtain the funding and ensure that leadership is focused on reaching the goals stated in the SETDA report in order to ensure that all locations have adequate bandwidth to successfully leverage the proposed solution over the long term. During our site walk-outs as well as during the operation of our solution, we will work with the State of Hawaii and individual school districts to identify any schools that need additional connectivity after award and an evaluation of actual service use.

We do not have enough information about the utilization of the current Hawaii Network connectivity at each site in order to identify or evaluate where the levels of connectivity are sufficient for the student population, however our proposed solution does not uniquely require any more bandwidth than any other responded to this RFP.

7.2.4.3. Vermont Internet Access

Most Vermont schools are connected to "high speed" broadband access as defined by their providers. This means the access levels can vary greatly in different portions of the state. Included in **Appendix E, State Profiles - Vermont**, is a summary table of connectivity levels across the state.

Response:

HP and ENA have read and reviewed the content included in Appendix E, State Profiles – Vermont and propose that Vermont review the SETDA recommendations. We understand that the connectivity levels throughout the state vary significantly, however we do not have enough information about the utilization of the current connectivity at each site in order to identify or evaluate where the levels of connectivity are sufficient for the student population. Our proposed solution does not uniquely require any more bandwidth than any other responded to this RFP and one of our partners in this response (ENA) has an existing contract with the state of Vermont that will permit schools and districts to acquire higher levels of connectivity without having to enter into a separate procurement.

7.2.5. Existing School Networks

The solution will provide wireless access for the computing devices to the school's existing network. While school internal networks vary, the network operating systems tend to cluster into Novell, Windows, Macintosh OS X, Unix and Linux. All schools have Ethernet capability.

Response:

As noted above, HP, through our partner ENA, will provide a completely separate, fully monitored wired LAN per facility including PoE switches to the access points and end-to-end network connectivity between the wireless clients and the IEN. All required cabling/wiring and hardware is included. As such, use of existing cabling in the schools will not be required. HP/ENA will work with each local school to coordinate any required electrical work.

ENA will provide skilled and licensed electrical and low-voltage wiring specialists as required to both identify required electrical work and perform necessary cabling to connect access points to the newly-installed LAN switches.

7.2.6. Server Functional Partitioning

If servers are provided as part of the solution, these servers should allow accommodation for effective and flexible use in school settings. For example, this could include the provision to logically subdivide the server functions so that a server may be used for working with a single student, groups of students within a classroom, a single classroom, groups of classrooms, a single school, groups of schools, to the entire state.

In general, server functions should be able to be isolated to individual or any group of users including across classes of users (e.g. students or teachers, 7th graders or 8th graders, etc.) as well as to be able to be used collaboratively across classrooms, schools, and potentially in a statewide fashion. For more information about the existing MLTI network, please see **Appendix E, State Profiles - Maine**.

Response:

HP does not anticipate the use of servers at any school location as part of our solution.

7.2.7. Growth

Suitable architecture must be provided to allow for growth in the wireless network infrastructure if there is growth due to additional grades in the school utilizing the infrastructure or growth in the population of the school utilizing the infrastructure.

Response:

The HP/ENA-managed wireless is designed to accommodate both the immediate needs as well as the future aspirations of districts in their pursuit to deliver wireless access to end point devices. ENA will provide a standards-based, flexible wireless solution that will meet and exceed MLTI wireless connectivity requirements. Bring your own device concepts, or BYOD, is a growing trend and challenge for states and schools. With an ENA provided solution, the State and local districts can be confident that they have a partner that can help navigate through these challenging and changing dynamics. ENA's managed wireless infrastructure will not only ensure prioritized bandwidth for wireless devices, but will also be able to provide optional service to district-owned, BYOD and/or guest devices. As school districts make local investments in technology and the number and variety of devices deployed in classrooms continues to grow, their wireless network infrastructure must be able to accommodate a wide variety of wireless devices while, at the same time, establishing priority networking for portable computing devices. ENA's managed wireless service will deliver both.

7.2.8. Print Services

The portable computing devices will be able to utilize a school's existing networked printers. The Bidder must list supported printing protocols as well as list common unsupported printing protocols, recognizing that schools tend to leverage technologies for longer timeframes than is commonly found in many other industries.

Response:

HP shall ensure that the portable computing devices shall be able to print using a school's existing networked printers. HP shall work with the districts as the primary organizational units used to aggregate requirements and define a district specific customization to the statewide base image deployed on all devices.

HP shall work with each district to aggregate the necessary commercially available drivers and group policies for all participating schools in that district. These drivers shall be included in the district specific customizations to be applied to the statewide base image. Thus the printer drivers used in a given school shall, by virtue of that school's membership in a given district and the creation of a set of image customizations for that district, be provided.

7.3. Remote Network Access

7.3.1. Portability

The Provider's portable computing device must enable students and teachers to access the Internet from their homes or other locations. The Provider's solution must also be accessible from remote locations, using the personal computing device, via other ISPs - for example, for a student to access the Provider's solution through the family's ISP account. Bidders must describe what methods are supported by the solution.

Response:

The HP MLTI device is configured with standards-compliant wireless and wired network access. Students and teachers can connect to the Internet via the family's ISP account using these standards-based network access methods and will be able to receive updates from the pre-installed LabTech agent as well as perform Internet and school work on the device from their home or other locations.

We have also included ClassLink's LaunchPad product on each HP MLTI device as part of our solution. ClassLink LaunchPad reinvents the experience of instructional technology: LaunchPad is the student and teacher's personalized cloud desktop that gives access to school from anywhere. LaunchPad is delivers access to files (both in the 3GB ClassLink storage area and for configured district- and school-based file servers), school software and powerful collaboration tools both within the school and when working remote.

7.3.2. Other Devices

It is desirable that the Provider's solution, if applicable, also be accessible from remote locations using another computer – for example, for a student to access the servers associated to the Provider's solution through the family's home computer. Bidders must document which aspects of its solution will be available to students and teachers from a device other than the Provider's portable computing device and what, if any, special software is necessary.

Response:

As mentioned in 7.3.1, HP has included ClassLink's LaunchPad product on each HP MLTI device. LaunchPad offers the ability for students and teachers to access their personalized cloud desktop that gives access to school from anywhere. LaunchPad allows students and teachers to log-in to their cloud desktop from another computer via a simple web-based interface as well as touch and iOS (iPad/iPhone) applications. The web- and application-based LaunchPad interface provides the same accessibility to the student and teachers from remote and personal devices using alternate internet access, as if they were using their own HP MLTI device.

8. Performance and Quality

8.1. Uptime

The Provider will ensure, at a minimum, that all functions of its classroom solution are reliable and available to the schools during the Period of Prime Usage. This period is 6:00 AM to 10:00 PM, local time (i.e. Maine local time for Maine or Hawaii local time for Hawaii), Monday-Friday, excluding holidays. During this period, the required uptime is as follows:

Period Of Prime Usage	Uptime Percentage
7:00 AM to 3:00 PM, local time, Monday-Friday, excluding state holidays	99%
6:00 AM to 7:00 AM and 3:00 PM to 10:00 PM Monday-Friday, excluding state holidays	95%

No scheduled downtime will be allowed for the instructional technology infrastructure except (1) for scheduled preventative maintenance, or (2) with the approval of the local school coordinator for issues affecting only the local school, or (3) with the approval of the Department Agreement Administrator for system-wide outages. This infrastructure includes the wireless LAN, servers, remote access and any other vendor-installed equipment.

Response:

HP and our technology partners have reviewed and agree to the infrastructure availability standards defined.

Our combined solution includes any new wireless infrastructure HP and its partner ENA install. This includes monitoring, redundancy and failover capabilities associated with a new wireless infrastructure. Multiple wireless access points per school will provide stable wide area coverage to teachers and students in the event of an access point failure. Fault tolerant architecture will automatically recover in the event that a local access point fails by appropriately increasing RF spectrum strength of the adjacent access points in order to provide seamless coverage. Next business day onsite dispatch and repair will occur if remote efforts to resolve recovery of the access point fail.

The HP/ENA managed datacenter will house network switching and core server equipment. Redundancy and failover capabilities in the event of hard failure are in place to where no single unit failure will compromise the infrastructure service.

In regard to the strategy to meet State goals of uptime and replacement within a timely manner, HP is proposing a combination of whole-unit user-replaceable hot spare stock and other HP-installed equipment.

HP is including a managed services agreement which covers the devices for 4 years from date of acceptance. This custom support and maintenance covers parts and labor in support of portable computing devices under normal wear provided under the MLTI project. This custom support is being accomplished by the use of "hot-spare replacement units" and a return to repair depot repair strategy. A hot-spare is defined as a complete unit. These hot-spare units will be supplied in the same configuration as the ordered, at a rate of 3% over and above the quantities ordered for that configuration. In regard to the strategy to meet MLTI goals of uptime and replacement within a timely manner, HP is proposing a combination of whole-unit user-replaceable hot spare stock and support for other HP-installed equipment.

8.2. Device Reliability

The solution will provide device reliability and a service level that ensures no student is without a functioning device for more than one (1) school day. This may mean that different support plans need to be in place for different schools.

Response:

HP will provide validation testing prior to unit deployment. Service levels will be met through hot-sparing of whole portable computing devices and will be available to each school with quantities to be defined as a percentage of units deployed with flexibility within the State to adjust as need dictates. End user replaceable parts (EURP) like batteries and power cords will be provided to each school districts technology administrator for quick repairs. Each school will be provided shipping material to return all failed units to a central HP repair facility. Once repairs are made, the device will be sent back to the schools to use to replenish depleted hot spare shelves.

HP will provide an additional quantity of hot-spare units over and above the number of units order by the State as a part of this Initiative. These hot-spare units will be supplied in the same configuration as those ordered. A hot-spare is defined as a complete unit.

Additional end user replaceable parts (EURP) will be supplied at a stocking level to be determined and in the form of components such as: hard disk drive; battery; AC Adapter, DVD and port replicator (if included) to allow for replacement of only the portion of the device that has failed.

8.3. Response Time

The solution must provide services to all students and teachers concurrently on the wireless network with quality response time that does not hinder or impede effective instruction and learning in the classroom. This requirement includes the ability for students to browse the Internet, download files and use streaming or multi-cast video without unreasonable delay.

Response:

HP/ENA's proposed wireless implementation will support the latest IEEE 802.11 a/b/g/n standards for extremely high aggregate and individual wireless client throughput. As a standard, we plan to use dual radio MIMO access points that support up to 300 Mbps data rate throughput to any one individual portable computing device (which will be equipped with dual band radios themselves), and up to 600 Mpbs aggregate bandwidth, but we can expand to 900 Mbps aggregate throughput per access points in certain areas as required. Furthermore, our service includes complex air time fairness algorithms and bandwidth allocation policies, created in coordination with the local technology staff, so that we can ensure students and teachers served will be able to have more than adequate capacity to reach local LAN-based resources. (Please note that adequate access to wired Internet-based resources may be affected by factors other than wireless capacity, in particular the capacity of the wide-area network connecting the school to other district resources, as well as the capacity and saturation level of the wired connection to the district itself.)

The ElitePad 900 standard configuration includes a Qualcomm Atheros AR6004 WLAN chip solution. This wireless solution provides dual stream (2x2), dual band (2.4GHz and 5.0GHz) Wi-Fi capability plus Bluetooth 3.0 functionality.

ENA's managed Wi-Fi service includes 2.4 GHz and 5 GHz (dual band) coverage at each location.

8.4. Business Continuity/Disaster Recovery

The Bidder will describe any program that they provide to cover replacement of the infrastructure in the event of theft or loss through a catastrophic event. A disaster recovery plan will be developed and implemented by the Provider to ensure that the school's infrastructure is restored by the start of next school day at 7 AM.

Response:

HP agrees with this requirement and shall comply by preparing and implementing a plan, in coordination with the States or school districts to ensure next school day restoration of the provided solution infrastructure following a catastrophic event. This plan shall leverage the prepositioned hot spare devices located at each school, the spare wireless infrastructure components carried by ENA's field service resources, regional deployment depots and the centralized hardware repair depot. Time to restore full service will be directly affected by the extent of loss or damage to the site. Restoration of service will begin as soon as HP is given full access to the site with authority to proceed from the district, assuming the necessary facilities are in full operating condition (e.g. no ongoing construction or repair activity, available power, ground, rack space, etc.) and approved for occupancy.

Additional Business Continuity/Disaster Recovery Planning shall be conducted with HP, our partners, the State as well as the enlisted input from the Local Districts. This Planning shall be documented and contained as a part of the detailed Project Plan.

1. Natural disaster/act of God

   Should wireless infrastructure equipment deployed by HP in support of the wireless device initiative be damaged or destroyed by a catastrophic event beyond the control of the State, district or HP, we will work with the district to restore service as soon as possible based on accessibility and safety conditions. HP will work with the State and districts to determine if it would be possible to deploy service at an alternate location until original sites are operational.

2. Loss of Infrastructure

   HP expects that the State and districts will secure and protect equipment with the same level of diligence that it would use to protect its own equipment. For equipment that is removed without HP's written permission, stolen or damaged, HP will work with district personnel to replace the component within 24 hours of formal notification of the loss. Lost, stolen or equipment damaged due to negligence will be replaced at the customer's expense.

3. Loss of Individual Systems.

   Portable computing devices are the responsibility of the individual they are assigned to. HP will strive to replace lost/stolen equipment within 24 hours. Replacement cost will be the responsibility of the customer. HP's current logistical plan can support the replacement of up to 3% of the deployed portable computing device environment within 24-48 hours (depending on site and weather conditions). Portable computing device losses greater than 3% of deployed environment will require an alternative response plan.

All of the core equipment supporting this initiative are housed in highly reliable facilities and configured in a manner to provide extremely reliable service.

HP will endeavor to resolve a service interruption at a school site as quickly as possible. Should wireless equipment deployed by HP/ENA in support of the wireless device initiative be damaged or destroyed by a catastrophic event, HP will work with the district to restore service at the local level as soon as possible based on current conditions in the building and the safety of our personnel in the area.

8.5. Server Failure

If the solution includes servers, then the solution must provide server redundancy or another fallback strategy in the event of server failure. This will provide continued operation of the servers in the event of server hardware or software failure.

Response:

No local server infrastructure is required as part of this deployment.

8.6. UPS

The Provider must include necessary Uninterruptible Power Supply (UPS) capacity to those parts of the solution where a power loss could cause data loss or corruption, instability or other long-term negative effects on the solution. The solution should be able to be fully-enabled upon restoration of power without reconfiguration or significant intervention. Therefore necessary included servers and key infrastructure devices such as switches and wireless access points shall have a UPS with capacity to allow for those devices to remain operative in the case of a power outage as necessary. This UPS should allow personnel or automated systems enough time to adequately shut down the server(s) or the infrastructure devices to avoid data loss or corruption.

Response:

HP intends to deliver a solution where a power loss will not cause data loss or corruption, instability or other long-term negative effects on the solution. Our solution will be able to be fully-enabled upon restoration of power without reconfiguration or significant intervention. Servers and key infrastructure devices such as wireless controllers, core routing equipment in HP/ENA's POP along with our collaboration solution will all be protected with uninterruptable power supplies and generator backup. A hallmark of our solution is that all key infrastructure is located outside of the school, ensuring resiliency and redundancy in the event of the loss of a single component and as such, it is not necessary for us to provide UPS power at a school location nor will it be required for on-site personnel at a school to shut down any server or infrastructure device provided in the case of power loss. ENA and HP do not intend to place UPS devices on switches and wireless access points located within a school as each of these are solid-state devices and will restore quickly upon restoration of power without any reconfiguration or significant intervention.

8.7. Performance Metrics and Reporting

The Provider must track and record operational Performance and Quality metrics necessary to ensure the successful management of the project. Such performance metrics will be reported monthly, by school as necessary, to the Department's Agreement Administrator.

The reporting will include such items as incidents, device and system failure types, downtime, repair turnaround times, trends, remediation needed, unresolved issues, recommended improvements, other factors necessary to ensure a successful project. Bidders should recommend metrics for consideration by the Department.

Response:

HP is partnering with ENA to manage and take first call for the MLTI network needs and will be working with ENA to expand their system capability with their call management system allowing tracking of those tickets thru the depot repair cycle and back to the hot spare shelf. In addition, HP intends to connect this system to HP's Global Call Handling System allowing for Level II and Level III analysis of deeper routed problems. This will also allow parts replenishment to take place automatically ensuring a ready reserve of parts for the repair depot and the schools.

This service plan counts on user-replaceable hot spare components being available locally at each school for replacement swap when an end user has an issue with their portable computing device. This effectively can bring end users up and running as quickly as they can have it exchanged within the schools daily activity schedule. HP will still have to retrieve and repair the originally units issue through use of the depot repair service as outlined. HP will have to maintain sparing levels to ensure the schools have spares on hand at all times, and in some cases, we may need to quickly ship additional units to the school within 24 hours should the sparing level fall too low.

Our reporting will allow us to manage to the defined metrics listed below:

1. **Metric Description:** Solution availability - 7:00 AM to 3:00 PM, local time excluding state holidays

   Required Level of Expectation: 99%

   Method of Monitoring: system generated reports to be mutually agreed upon within 60 days of award

   Strategy for Correcting Non-Compliance: HP will work with the State to develop a governance system to address non-compliance.

2. **Metric Description:** Solution availability – 6:00 AM to 7:00 AM and 3:00 PM to 10:00 PM, Monday-Friday, excluding state holidays

   Required Level of Expectation: 95%

   Method of Monitoring: system generated reports to be mutually agreed upon within 60 days of award

   Strategy for Correcting Non-Compliance: HP will work with the State to develop a governance system to address non-compliance.

3. **Metric Description:** Upon commencement of deployment a replacement or functioning device will be made available to each participating teacher and student within no more than 24 hour time frame from the point of first reporting an issue or failure

   Required Level of Expectation: 100%

Method of Monitoring: system generated reports to be mutually agreed upon within 60 days of award

Strategy for Correcting Non-Compliance: HP will work with the State to develop a governance system to address non-compliance.

HP will have overall ownership of reporting requirements and will consolidate information from the different aspects of the overall plan into one customer report.

9. Functional and Asset Security

9.1. Wireless Security

The solution must protect against eavesdropping and unauthorized access. The solution may include encryption or other techniques to provide this assurance which the local school may turn on or off as local policy indicates. The Bidder must describe how its proposed solution will provide such protections.

Response:

For all HP/ENA managed wireless implementations, HP, through our partner ENA, will by default use WPA2 encryption of all data between the MLTI device and the wireless access point. WPA, otherwise known as Wi-Fi Protected Access, is the current standard for data integrity protection and secure encryption as adopted by the Wi-Fi Alliance, and WPA2 is the latest, most secure implementation of this standard. HP/ENA's managed wireless service is designed to be both secure and flexible, and we can implement wireless security policies that incorporate a variety of WPA authentication mechanisms, including the WPA2 pre-shared key (PSK) protocol known as WPA Personal, the 802.1X authentication (often referred to as WPA Enterprise), and the more recent encryption algorithm called TKIP (also known as Temporal Key Integrity Protocol).

In addition to the encryption of data between clients and the wireless access points, and the various authentication methods HP/ENA can support, HP/ENA can also provide rogue AP detection to identify, and optionally, to eliminate other "rogue" APs that may be introduced to the school WLAN and prevent those APs from successfully allowing MLTI clients to attach. Finally, all management data traffic between the locally placed wireless access points and our cloud-based controller infrastructure will be SSL encrypted.

9.2. Authorization Control

Security must allow access to authorized users only – to only those resources, files, applications, and services that they are authorized to use. Security will be definable by an administrator both on an individual user basis and by class of user (teachers, students, parents, administrators, etc.). Identification of a user must be unique to each individual.

Operating systems and the application software must have the ability to be restricted or locked down in an appropriate way that prevents inadvertent or deliberate changes in key settings and, thereby, reduces support requirements.

Response:

ENA will allow access to the wireless network via pre-shared WPA2 key embedded in the base image of the portable computing device. Upon first access to the network, users will be in a "walled garden" environment where basic information about the user will be validated and mapped to the MAC address of the device to facilitate troubleshooting. Devices will be re-presented the walled garden authorization tool no more than once every 90 days, upon change of device or every June 30, whichever comes first. Guest access will be provided through a separate wireless network name deployed using the same infrastructure and new users will be permitted provided that there are adequate remaining concurrent guest users available in the building.

HP's solution shall comply with this requirement using the operating system and/or BIOS. Access will be controlled at the user level and shall incorporate role based access entitlements to defined classes of applications and configuration privileges. The Technology Administrator at the district/school shall have rights to administer and manage the policies used by these systems to control device authorization.

9.3. Anti-virus Protection

The solution will include reasonable and sufficient anti-virus and malware protection in the device, in any servers and in any other necessary components. Such protection must include timely updates. The Provider will eradicate viruses or related infections that infiltrate the protections provided and will assist schools in returning the devices/system to its normal, stable state. Ideally, the anti-virus protection should not noticeably degrade overall portable computing device performance.

Response:

The Microsoft Office Education Desktop SKU - Part Number 2UJ-00001 license includes Endpoint Protection which provides round the clock protection against virus, spyware and all malware. This feature enables real-time protection against potential threats, automatic scheduled scans of the hard drive and integration with web browsers for download protection. Any threat to a portable computing device's security, such as a virus or Trojan intrusion, is handled according to preset policy, normally by quarantine and/or deletion of suspect files. All such remediation actions are fully automated and require no user interaction. Local users will be notified (via a "pop up message) of any virus intrusion, enabling the user to identify what action on their part triggered the infection.

Such intrusion events are also reported to the cloud-based LabTech where DE staff will monitor for localized outbreaks and take proactive steps if required to contain any outbreak.

Signature files, used by Endpoint Protection to recognize and remediate threats, are updated every 8 hours and the most recent signatures will be deployed to all managed portable computing devices on a regular basis.

Policies and procedures to handle individual and large scale intrusions/threats can be customized on a per-District basis. These policies and procedures will form part of the data-gathering exercise during discussions with each district.

9.4. Backups

In order to protect the solution from data loss or corruption, backup and recovery capabilities are required to permit regular, periodic backup of the storage device(s), logical drives, directories, administrative and configuration data, application software, and user files and to restore all of the above on demand. Backup protection should include any server-based parts of the solution necessary to restore the solution in the event of data loss or corruption. The ability to perform automatic scheduling of backup functions is desired. This should include automatic backup from the portable computing device to a server or some other facility on a daily basis to prevent data loss. The Bidder must describe the capacity and features of its backup solution, and which data would be recoverable by the user, by a school administrator, or by provider.

Response:

HP's understanding of the design, and our implementation thereof, is that students will not maintain data files on their local devices—however our backup assumption is that files will be backed up in the ClassLink LaunchPad cloud desktop solution.

HP will provide training to teachers on the use of the ClassLink online storage tool as outlined in the detailed Professional Development Plan. Students will also have access to all online training options which include embedded training videos and robo help. In addition, customized webinars shall be developed and archived for students to access on demand.

HP will not backup, nor maintain a mechanism for personal files, outside of classroom work, to be backed up to a remote location. No files or other information which violates any digital copyright of legal owner's files shall be stored or otherwise maintained on HP owned devices. The State and Districts shall own sole responsibility to ensure all content stored on the devices supplied by HP under this initiative is appropriate and legal.

Due to the variety of personal files, HP and our partners will maintain no responsibility for, not shall HP provide backup for these files. The students shall own all responsibility for backing up and maintaining music, photos and other personal files. The students will be able to use a student supplied USB thumb drive to copy their files to as a backup and will be able to place them back onto their device as needed.

The proposed ClassLink solution provides 3GB of personal locker disk space for students and teachers to store any personally developed school content or work and will also integrate with locally-deployed servers and disk space dedicated to students and teachers to extend the solution to almost limitless capacity. ENA and HP does not expect to be able to restore any locally stored personally developed content or work from a portable computing device that experiences a significant issue or is required to be re-imaged in concert with the start of the new school year or due to maintenance.

Data deleted by the end user or administrator is recoverable for one year in the web interface without the selection of archiving feature within the ClassLink platform, in which case data deleted by the end user can then be recovered for the retention period determined by the user's organization for the archive. The archive feature provides a true archive as required by e-Discovery and public records laws with complete versioning and the inability for school, district or state personnel to alter.

9.5. Warranty, Insurance, Damage, and Theft

9.5.1. Warranty

Portable computing devices and included attachments (power supply, carrying case, etc.) will need to be replaced occasionally for a variety of reasons that include defects, normal wear and tear, and accidents. Defective equipment will be replaced or repaired by the Provider at no cost. Consistent with the requirements of this Section of the RFP, the Provider shall warranty against normal wear and tear and ensure the delivery of all services for the term of the agreement. Barring extraordinary circumstances such as are listed in the Force Majeure provision of the *NASPO Standard Terms and Conditions* (**see Appendix D**), the Provider will be responsible to ensure that the devices and other solution equipment are available per the specifications in the Performance and Quality provisions of this RFP. Notwithstanding the cause of any loss, the Provider must provide replacement units in a timely manner and at a reasonable cost for the term of the Agreement.

Response:

HP is including managed services which cover the portable computing device for four years. This custom support and maintenance covers parts and labor in support of portable device under normal wear as well as coverage for defective units. To meet availability and timely replacement requirements this custom support is being accomplished by the use of "hot-spare replacement units" and a return to repair depot repair strategy. A hot-spare is defined as a complete unit. These hot-spare units will be supplied in the same configuration as those ordered. End user replaceable parts like keyboard, mouse, battery and power bricks will also be available to the school districts.

9.5.2. Insurance and Damage

The Provider shall assume the risk of loss or damage (e.g., fire, flood, theft, accident, etc.) of the equipment provided, except that each local school unit shall be responsible for any replacement or repair costs due to the negligent or intentional act of the school, a teacher, a student. In the case of individual fault, the local school unit will determine as a matter of local policy whether any or all such local costs should be borne by the individual teacher, student, or parent(s). These local costs shall not be counted as part of the direct or indirect bid price defined in **PART V PROPOSAL EVALUATION AND SELECTION**.

As part of its strategy to meet these provisions of this RFP, the Provider may elect to provide a percentage (specify) of overage or surplus stock of equipment within schools or other depot sites, or insure against all other risks of loss or damage through some other means such as commercial insurance. Regardless of the method proposed by the Bidder, the Bidder will describe how it has integrated its protection plan into its overall support plans. All costs associated with the Provider's proposed protection plan shall be counted as part of its bid price and should be incorporated into the Bidder's annual cost proposal defined in **PART V PROPOSAL EVALUATION AND SELECTION**.

Response:

Risk of loss will pass to the purchasing or leasing entity upon delivery to the “ship to” location specified in the order. As specified in the RFP instructions, no additional costs have been included in the bid price to cover units damaged due to negligent or intentional acts.

However, HP does take exception to the assumed risk of loss due to accidental damage or theft. HP has provided in section 9.5.3, under No-Fault Protection, highly recommended service options to cover accidental damage and preventive steps to help deter theft. The 4-year warranty parts and labor coverage does not include cracked screens, cases or spills due to accidental handling, which is industry standard. See optional coverage for accidental damage and theft in Section 9.5.3.

HP also takes exception to covering any theft of computing devices. Each participating State, School District, and School maintains insurance coverage which should protect against loss and replacement of school owned property (including the portable computing devices which are the subject of the RFP). HP has provided its Certificate of Insurance showing coverage for its responsibility for covered property damage. Further, HP has provided alternatives through which each participating party can protect itself from damage not covered by HP as reflected in HP's Certificate of Insurance.

9.5.3. No-Fault Protection

The Bidder must provide an optional price schedule for an "enhanced" agreement for no-fault repair and replacement that local school units may purchase at their option and at their own expense from the Provider. The cost of this enhanced, no-fault warranty will not be included in the bid price evaluation as defined in **PART V PROPOSAL EVALUATION AND SELECTION**. Bidders should recognize that this enhanced protection only needs to provide protection against categories of loss or damage that are not covered in **Section 9.5.2. Insurance and Damage**.

Response:

An existing program that HP strongly recommends for each State, district or individual school to purchase is the optional one-Year Accidental Damage Protection (ADP) Care Pack coverage, product SKU UK711E, discounted to $21.00 per unit for one-year of ADP coverage. Note that HP also offers 2, 3, and 4 year ADP options as well.

This one-year option is an exceptional offer. It is the experience of HP that most accidental damage, outside of standard use warranty coverage, will occur in the first year when students are learning how to handle, store, carry and care for their new portable computing devices. This one-year ADP Care Pack only applies to the first year the unit is under warranty and cannot be purchased after the first thirty days the product has shipped. The ADP Care Pack is registered to a specific portable computing device serial number for the entire first year. HP's service description for Accidental Damage Protection (ADP) is listed below.

In addition to the standard commercially available ADP offering HP has developed a custom-enhanced agreement for no-fault whole unit replacement of portable computing devices for other school districts and would be happy to enter into further discussions with the State. One customized plausible approach would have the State or individual districts pre-purchase, in batches of ten incidents, whole unit no-fault replacement service events. The service events are independent of the unit serial number and can be applied as needed over the life of the unit. Pricing for this custom no-fault whole unit replacement offering is included in Appendix B, Cost Proposal Form, Table 4.

HP's Service Description for Accidental Damage Protection (ADP)

For eligible products, specific service levels may be offered with accidental damage from handling protection. Where the accidental damage protection service feature applies, the customer receives protection against accidental damage from handling to the covered hardware product as part of this service.

Accidental damage from handling is defined as physical damage to a product caused by or resulting from a sudden and unforeseen incident, provided such damage occurred in the course of regular use. Covered perils include non-intentional liquid spills in or on the unit, drops, falls, and electrical surge. Covered damage also includes damaged or broken liquid crystal displays (LCDs), and broken parts.

The accidental damage protection service feature does not cover the following:

- Maintenance, repair, or replacement necessitated by loss or damage resulting from any cause other than normal use, storage and operation of the product in accordance with the manufacturer's specifications and owner's manual
- Any equipment relocated outside the country of purchase and not covered by an HP Care Pack service that includes travel accidental damage protection
- Theft, loss, mysterious disappearance, or misplacement
- Data loss or corruption; business interruptions
- Fraud (including, but not limited to, incorrect, misleading, erroneous, or incomplete disclosure of how the equipment was damaged to the customer's adjudicator, the servicer or HP)
- Accidental or other damage to the product that is cosmetic in nature, meaning damage that does not impact operation and functioning of the computer
- Computer monitor screen imperfections, including but not limited to 'burn-in' and missing pixels, caused by normal use and operation of the product
- Damage to product(s) whose serial numbers are removed or altered
- Damage or equipment failure that is covered by manufacturer's warranty, recall, or factory bulletins
- Damage caused during the customer's shipment of the covered product to or from another location
- Damage to hardware, software, media, data, etc., stemming from causes including, but not limited to viruses, application programs, network programs, upgrades, formatting of any kind, databases, files, drivers, source code, object code, proprietary data, any support, configuration, installation, or reinstallation of any software or data; or use of damaged or defective media
- Any and all pre-existing conditions that occurred (i.e., took place) prior to the date of purchase of the HP Care Pack service
- Product obsolescence

Eligibility for purchase of the accidental damage protection (ADP) service feature requires the product to be covered by a factory warranty or a warranty extension service with coverage duration equal to or longer than the accidental damage protection service.

Limitations to the accidental damage protection service:

- For HP business portable computing device products, HP does not limit the number of qualified accidental damage from handling claims for the duration of the HP Care Pack service agreement; however, accidental damage claim rates for each HP product model and Customer account are constantly monitored; HP reserves the right to physically audit and/or collaborate with the customer if claim rates are high.
- For products other than business portable computing devices, accidental damage protection coverage is limited to one claim per product per 12-month period commencing from the HP Care Pack service start date. Once the specified limit is reached, the cost of repair for any additional claims will be charged on a time-and-materials basis, but all other aspects of the HP Care Pack service purchased will remain in effect unless specifically documented otherwise in the country of purchase. For those customers with a history of significantly high claims, HP also reserves the right to deny acceptance of requests to purchase the accidental damage protection service feature.

9.5.4. Theft Deterrent

The portable computing device provided must incorporate security features to deter theft. This should include an unavoidable log-in or greeting, or similar process, that identifies the program and/or owner of the device. These security features must be operative regardless of the physical environment in which the portable computing devices are found. The portable computing devices proposed will be used by students and teachers in the classroom, will be transported by students and teachers between school and home, and used in the home as required. Securing the computer by physical means will not be practical as the only security measure. The Provider is encouraged to include external physical markings or property tags of some type that provide a unique, visual appearance to identify the device as part of this program. The Bidder will provide a detailed description of security features on the proposed devices to deter theft.

Each Bidder must describe here how it proposes to satisfy the requirements of this section. The Bidder's description must make clear what it will provide and what it would require of the Department and the schools.

Response:

The proposed solution includes features to deter theft as follows:

1. A logon splash screen shall be configured using local policy in the same fashion as Group Policy. Such policy shall be set in the base OS image. The required message text and layout needs to be provided prior to master image creation.
2. Each device shall be labeled with a sticker that states the device is "property of the State of Maine" (or other appropriate information) and that the device has been equipped with anti-theft software.
3. HP will also have the ability, through the help desk and the LabTech agent, to remotely wipe the entire MLTI device should it be lost or stolen.

As an option, HP can include Computrace by Absolute Software on devices leased or purchased under this program. Offering is included in Appendix B, Cost Proposal Form, Table 4.

Computrace for endpoint security is used by hundreds of school districts across the nation to centrally track, locate, and secure IT assets on and off the network within a single cloud-based console. Asset inventory cycles are reduced from days to minutes.

Alerts are sent as soon as suspicious behavior is detected. Computrace provides a theft recovery service - Guaranteed.

The Computrace persistence module is embedded into the firmware of portable computing devices at the factory. Once the Computrace Agent is installed and activated, customers enjoy a level of persistence that is virtually tamper-proof, providing them with a trusted lifeline to each device in their deployment.

Furthermore, Absolute Software will provide stickers for every license purchased to mark the devices as being protected by Computrace to help deter theft. To cover the requirement for an unavoidable log-in greeting, HP will work with school IT administrators to set a splash screen using group policy in Active Directory, as an example, that notifies a user upon login of the ability to track the machine using Computrace persistent technology.

Managed Theft Recovery (Optional Feature and Cost)

The Absolute Theft Recovery Team has seen the successful recovery of tens of thousands of stolen computers. Comprised of former police officers and seasoned law professionals, the Theft Recovery Team works closely with police and law enforcement agencies to ensure that criminals are identified and portable computing devices are recovered.

Once a stolen computer connects to the internet, the Computrace Agent silently sends location and other information to the Absolute Theft Recovery Team. With the customer's approval, the Team forensically mines the computer using a variety of procedures, including key captures, registry and file scanning, geo-location, and other investigative techniques. These procedures allow the team to gather evidence and determine who has the computer and how it is being used. Extracted evidence is then provided to police, who use the information to obtain search warrants or subpoenas and perform the physical recovery. The stolen computer is returned to the school directly, and no further involvement beyond reporting the theft is required. As customer privacy is our utmost concern, Absolute Forensics Tools are only deployed after a police report has been created and only with the customer's approval.

Below are additional links to examples of how Managed Theft Recovery works in the Education sector:

http://www.absolute.com/Shared/Datasheets/CT-K12-SS-E.sflb.ashx

http://www.absolute.com/Shared/Datasheets/CT-EDU-SS-E.sflb.ashx

Service Guarantee

If a computer or tablet protected with the Computrace Service Guarantee is stolen, Computrace will recover it or you may be eligible to receive up to $1000 per computer or up to $400 per tablet. Certain conditions apply. For more details read our Service Agreement and our Service Guarantee FAQ:

http://www.absolute.com/en/company/legal/agreements.aspx

http://www.absolute.com/en/support/faq/service_guarantee.aspx

Asset Administration

Collect incredibly accurate and comprehensive information from each device. Then create customized policies and alerts to be notified as soon as an unauthorized change is detected. Asset information includes user identification, physical location, and the installation of software/hardware that may not comply with government and corporate regulations.

Data and Device Security

Remotely delete sensitive data on missing computers and produce an audit log of the deleted files to prove the data was removed from the device. Freeze a computer and display a custom message to the user instructing them to comply with specific requests for action. Access and retrieve files from a device regardless of its location. Create encrypted volumes to protect data.

Geo-technology

Use the physical location of a device as a security measure. Track assets on an internet map using GPS or Wi-Fi technology including current and historical locations. Build predefined areas (geo-fences) to contain a device and receive an alert if it strays or if any other designated condition occurs. If a device is not where it should be, investigate and determine if further action is required.

Use GPS or Wi-Fi technology to track your assets on an internet map.

Computrace provides school districts across the country with the ability to track, manage, and secure computer and tablet devices, especially in support of 1:1 programs. The importance of firmware persistence cannot be overstated. It provides a consistent connection to each device, including a managed theft recovery service that is guaranteed so schools can replace unrecoverable devices with minimal impact to their budget.

9.5.4.1. Maine Theft/Loss data

Maine's current asset pool contains nearly 75,000 notebook computers, initially deployed to students and teachers in the fall of 2009. As of October 1, 2013, a total of 418 devices have been reported stolen or lost. This represents an average of 0.2% loss per year due to theft or loss.

Response:

HP acknowledges this percentage, however takes exception to covering loss due to theft or accidental damage.

9.6. Asset Management

The Provider will include an online asset management system. The asset management system should allow the Department and participating schools to view details about all assets (e.g. the portable digital device, network switches, servers, wireless access points, etc.) supplied by the Provider's solution including details such as site location, device assignment, device details and status (e.g. assigned to a user, out for repair, etc). The asset management system should allow querying and reporting capabilities. The asset management system should include necessary security precautions to insure that only authorized personnel access the information contained within the system. In addition, the asset management system should allow for multiple levels of

authorized users to allow for, at the minimum, site-, district-, and state-level management. The Bidder must describe all of the data elements that will be included in the online asset management solution, and which data elements would be modifiable for each level of access to provide management functionality while maintaining data security, and which data elements would be dynamic and updated automatically.

Response:

HP, through our partners ENA and Dynamic Edge, have an existing asset management system that will be extended to provide local school technology staff the ability to associate assets to school district specific ID's, and also provides the ability to disassociate assets from the database. This online asset management system shall be web enabled with a database that allows the districts and local school units to ascertain device site location, Device assignment, Device details and status (e.g. assigned to a user, out for repair). The asset management system shall allow querying and reporting capabilities, and shall include necessary security precautions to ensure that only authorized personnel access the information contained within the system. Each district/school shall also be able to view assets deployed to its site(s). In addition, schools shall be able to utilize the asset manager to assign portable computing devices to specific students or teachers. Inventories will be made available to each site regarding that site's equipment at installation time as part of the installation and acceptance process.

The database shall be secured behind a firewall and will require usernames and passwords to provide the appropriate level of access to State, district users and HP users appropriately. The system will utilize roles and claims to ensure that only the appropriate information is presented to each user.

All devices will include an asset tag sticker and will be assigned to each end user.

The asset tracking system shall integrate with the support ticketing systems described in this proposal to help maintain service flows and processes. All RMA and device repairs will be stored within the asset tracking system to ensure there is one repository for users to view all information related to the assets and associations to users.

Reports shall be developed for the appropriate level of drill down capability within the system based on a user's role to display the information to the users on a real time basis.

The basic tracking of assets upon deployment within the asset database will start day one.

9.6.1. Site and District Management

It is not uncommon for school districts to have more than one participating school. Each site should be able to view assets deployed to the site. In addition, schools should be able to utilize the asset manager to assign portable devices to specific students or teachers. Sites and districts should be able to perform management tasks against one, some, or all of its assigned assets. The most common task performed to some or all assets is the assignment of an asset to an individual by entering an ID or other unique identifier into a field reserved for local inventory management. The solution should include a method for a site to import data either directly from the school's student information system or from a simple data file (i.e. txt, csv, etc.) in order to update or overwrite site modifiable fields. Inventories will be made available to each site regarding that site's equipment at installation time as part of the installation and acceptance process.

Response:

The HP asset management system will allow school personnel to assign portable devices to specific students and/or teachers. Sites and districts will be able to perform management tasks against one, some or all of its assigned assets. We will extend our existing asset management system to permit a site to import data in specified formats from a simple data file in order to update or overwrite site modifiable fields. Site inventory information will be available to each site as part of the installation and acceptance process.

9.6.2. Transfers

It is common for students (and even teachers) to transfer from one participating site to another. The asset management solution must provide a method to easily transfer assignments of assets from one site to another. This method must include active acknowledgement of receipt of assets at a receiving site by an authorized user because the Department requires that districts accept certain fiscal responsibilities related to those assets it is assigned, based on the asset management data.

Response:

The asset database will be flexible to allow transfers and reassignments and will include an active acknowledgement of receipt of assets at a receiving site by an authorized user in order to permit the Department's fiscal responsibilities to be acknowledged by the receiving site.

9.6.2.1. Maine school transfers

As a matter of practice, when students in grades 7-8 transfer between participating sites, the device follows the student. The same is true for teachers in grades 7-12 since the Department covers the annual seat cost for all 7-8 students and 7-12 teachers. However, for students at participating schools in grades K-6 and 9-12, the local school covers the annual seat cost, and as a matter of practice, when students transfer out of those schools, the school retains the device.

Response:

HP acknowledges and understands.

9.6.3. Replacements

The Department expects that for a variety of reasons, a device may require replacement. Bidders must describe how it will provide replacement devices for the term of the Agreement. Replacement devices must be the same as the original device or functionally equivalent and similar enough so that it does not interfere with the intended educational use nor any of the integrated support methods and protocols established by the Bidder to meet the requirements of this RFP.

The online asset management system must include a method that allows schools to request replacement devices. The solution must include the capacity to maintain records of these transactions and an internal workflow that provides the messaging capacity to resolve questions related to a request in order to complete a replacement request. The method must include the capacity to categorize replacement requests (i.e. stolen, dropped, liquid damaged, etc.). Newly introduced devices must be tracked in the asset management system like any other asset, and the introduction of associated device data is the responsibility of the Bidder.

Response:

The online asset management system will allow users to process and receive a replacement device. The replacement will be either the original or a functionally-equivalent and similar device to not interfere with the intended educational use or support methods and protocols established by HP.

Records of all transactions will be recorded in the asset management system along with the capabilities for an internal workflow and messaging to resolve questions related to a request. Categories of replacement requests will be included and all newly introduced devices will be tracked in the asset management system like any other asset.

9.6.4. Asset History

The online asset management system will provide a comprehensive history for each asset that includes assignment history (i.e. a device may be assigned to more than one student over the course of multiple years or may be transferred from one school to another), device data changes (i.e. in the current program, ethernet addresses (MAC) are changed when logic boards are replaced in devices. This unique address must be updated in the asset management solution), repair history, etc. The asset history for any individual asset must be easily accessible to authorized users.

Response:

This online asset management system shall be web-enabled with a database that allows the State and local school units to ascertain device site location, device assignment, Device details and status (e.g. assigned to a user, out for repair, etc.). The asset management system shall allow querying and reporting capabilities, and shall include necessary security precautions to ensure that only authorized personnel access the information contained within the system. Each district/school shall also be able to view assets deployed to its site(s). In addition, schools shall be able to utilize the asset manager to assign portable computing devices to specific students or teachers. Inventories will be made available to each site regarding that site's equipment at installation time as part of the installation and acceptance process.

The database shall be secured behind a firewall and will include an asset database server that will trust the State and/or District users and HP users appropriately. The system will utilize roles and claims to ensure that only the appropriate information is presented to each user.

9.6.5. School Information

Basic demographic information about each site must be maintained in the asset management solution. This must include contact information for key individuals at each site including but not limited to school administrators and technology administrators. This information must be easily accessible to authorized users.

Response:

Basic demographic information about each site will be maintained in the asset management system including contact information for key individuals at each site in an easy-to-access and use format.

9.6.6. Reporting

The online asset management system must include reporting functionality. Reports should be downloadable, and when appropriate, available in common tabular formats for reuse of the data. At the minimum, the system must include reports of asset inventory by type (user device, network assets, etc.), contact information, asset transfers, and replacement devices. Reports must only include data viewable to the authorization level of the user, and reports must be able to be produced against a site, district, or the entire state inventory.

The intent of providing reporting to both site, districts, and the Department are to facilitate better management of the inventory of assets including trend analysis related to topics like transfers, replacements, or repairs.

The Provider should describe other functionality included in the asset management system that will facilitate successful management of the project at both a Department and site level.

Response:

The asset management system will include reporting functionality. Reports will be downloadable in CSV format and the system will include requested reports of asset inventory by type, contact information, asset transfers and replacement/hot spare devices. Access to reports will be based on the authorization level of the user and can be provided against a site, district or the entire state inventory.

10. Professional Development, Curriculum Integration, and Consultation

The Department believes that professional development for educators, education leaders, and technology support personnel are vitally important to the success of a 1:1 program as described in this RFP.

The Provider will become a partner to the Department of Education, and all professional development activities will be developed in coordination with the Department. The Provider will develop and deliver professional development materials and opportunities under the direct supervision of the Department of Education. While the Department recognizes that good teaching and learning practices exist with or without technology, it also believes that the presence of personal digital devices in classrooms and outside of classrooms necessarily changes the teaching and learning landscape. As such, the Department seeks a Provider that can support effective and innovative teaching and learning processes that without this foundation could not exist.

The MLTI has adopted and promoted two models to guide teacher practice and the integration of technology into instruction and learning. These models are Technological, Pedagogical, Content Knowledge (TPCK) by Drs. Punya Mischra and Matthew Koehler (http://www.tpck.org) and Substitution, Augmentation, Modification, Redefinition (SAMR) by Dr. Ruben Puentedura (http://www.mlti.org/samr and http://www.hippasus.com/rrpweblog/). These models should act as a guide in the development and implementation of all professional development materials and opportunities.

Response:

HP has seen firsthand how critical effective professional development is in making the difference between a large technology purchase and a transformational instructional technology initiative. No greater dividend can emerge from a 1:1 program than the investment the institution makes in the professional development of its instructional, support and administrative staffs. Accordingly, HP understands and agrees that professional development for educators, leaders and technology support personnel is vitally important to a successful 1:1 program that institutes a successful wireless student centered, digital learning environment and has developed a Professional Development Plan (PDP) that delivers the highest quality, research-based offerings.

There is little argument that technology-empowered learning is a requirement for any education institution to be effective in preparing students for work and life in the 21st Century. Supplying students and teachers with the technology tools is merely the first step. The real focus should not be on the technology but more on the paradigm shift related to how instruction is delivered by effectively integrating the technology into the learning process. HP's PDP is a comprehensive approach focused on enabling educators, leaders and technology support personnel to make that paradigm shift and to engage students and encourage them to take responsibility for their own learning.

This PDP is designed in a way that each participating state and school district can personalize their professional development program to meet the adoption and implementation requirements of their 1:1 program. While HP has proposed an overall professional development plan specifically to address transforming education and the classroom experience with 1:1 implementations, we understand that all professional development activities will be coordinated and fine-tuned for Tier 1 and Tier 2 participants with the Department of Education from each participating state and with school district leadership for Tier 3 participants, therefore we reserve the right to make changes to the plan proposed in this response in cooperation with MLTI participants to ensure that we meet their educational outcome goals. Please see Working with the Department of Education later in this section for the additional dedicated resources. HP is offering to work with Tier 1 and Tier 2 states with minimum qualifying purchases as defined in Table 31 in the Building a Comprehensive Plan section.

Professional Development Partners

HP's PDP leverages the skills and experience of seasoned professional development partners, with a long-term commitment to education, to construct a comprehensive PDP that includes state-level consulting, leader-led workshops, train-the-trainer workshops, online facilitator-led classes, self-paced classes, video tutorials, webinars, and a robust selection of online resources to meet the needs and learning styles of educator and leader learners and Tier commitments. As described later in this section, this approach addresses each of the professional development challenges outlined in the RFP.

A brief summary of the professional development partners and their offerings follow. The graphic below illustrates each partner's contribution to the professional development plan ultimately delivering a comprehensive program meeting all of the MLTI professional development objectives and serving all of the MLTI identified professional development recipients.

Please see Sections 10.2.1 Educator Professional Development, 10.2.2 Leadership Professional Development, 10.2.3 Technical Professional Development and HP Appendix D— Professional Development Partners and Programs for detailed information about the programs each will offer.

Table 29. HP's Professional Development Partners.

PROFESSIONAL DEVELOPMENT PARTNER	STATE DOE	TRANSITION SUPPORT	EDUCATORS PD	LEADERS PD	TECHNICAL PD
hp	✓	✓			✓
Microsoft	✓	✓	✓	✓	✓
intel		✓	✓	✓	
Atomic Learning		✓	✓	✓	✓
ClassLink			✓	✓	✓
common sense media			✓	✓	
McREL			✓	✓	
ena Education Networks of America	✓	✓	✓	✓	✓

HP will provide device orientation and operation training content primarily targeted for district technology directors but also available to teachers and administrators through the regional workshops and a variety of online webinars and video training vignettes.

Microsoft will contribute a broad spectrum of professional development content for participating states, educators and leaders in the form of online self-paced classes, regional train-the-trainer workshops, state-level Department of Education expert advisory consultations and self-assessment tools to help educators and leaders connect, collaborate, create and share so that students can realize their greatest potential.

Intel will provide comprehensive professional development resources and content for educators, leaders and technology support personnel in the form of regional train-the-trainer workshops, online leader-facilitated classes and self-paced classes which incorporate elements from the Intel Teach and Intel

Transforming Learning (with 1:1) course offerings.
The combination of these two programs can create a sustained teacher professional development offering supporting schools for their implementation of 1:1 learning. The programs encourage and support the development of professional learning communities.

McREL will provide professional development for both mentor teachers and leaders based on McREL's research-based *Using Technology with Classroom Instruction That Works* publication and the Balanced Leadership Framework. These interconnected training sessions, with support from leaders, help teachers of all grade levels meaningfully integrate the nine categories of instructional strategies for increasing student achievement with technology to manage change, develop purposeful communities and use technology as a transformative tool for instruction. Taken together, these two programs provide mentor teachers and leaders with the necessary training to effectively integrate technology into instruction to provide transformative opportunities for students.

Atomic Learning is the Internet-based technology training solution of choice for nearly 27,000 schools, colleges and universities worldwide. Atomic Learning will provide two of its most popular and best suited solutions for the Multi-State Learning Technology Initiative (MLTI) consisting of **Atomic Integrate and Atomic Mobilize.** Atomic Integrate is Atomic Learning's signature solution providing training and integration on software applications. Atomic Mobilize provides professional development necessary to plan, implement, and revitalize successful initiatives that bring portable technology and learning together.

Common Sense Media proposes to continue its highly successful state wide Digital Literacy and Citizenship program model currently implemented in Maine, where over 75% of schools are using their resources. Doing so will empower students throughout the state to think critically, behave safely, and participate responsibly in our digital world so that they can harness the full potential of technology for learning.

ClassLink LaunchPad™ is an intuitive, easy-to-use virtual desktop that gives students and teachers seamless access to their file storage, backup and individualized learning environments from their HP-provided MLTI device or any computer in the school, community or from home. ClassLink will provide online leader-facilitated System Overview training for technology administrators and remote train-the-trainer turnkey professional development on LaunchPad. ClassLink will also provide the platform to launch and authenticate the online professional development programs offered with the HP PDP.

ENA provides connectivity, communication and collaboration services to the K-12 community nationwide including five statewide education networks and 550 school districts. Working in collaboration with HP, ENA will lead and coordinate the overall PDP execution. ENA will provide project management services to manage the professional development partners.

Methodology

The HP PDP for educators and leaders focuses on three crucial elements:

1. Great Teachers and Leaders – Consistent with Maine's Education Strategic Plan, HP's PDP is designed to improve educator and leader instructional and administrative effectiveness in a 1:1 environment and encourage communities of practice for continuous improvement.
2. Capacity Building – In order to ensure technology is integrated with effective teaching to ultimately achieve transformative second-order change, building capacity at both the state and local levels is key to success.
3. Delivery Options – In order to meet different learning styles as well as mitigate the challenges identified in the RFP and noted from other 1:1 implementations, HP and its partners have developed a full suite of professional development offerings with varied delivery options (summer institutes, leader-led workshops, online self-paced, virtual instruction, webinars, video tutorials, etc.) to meet every need.

Professional Development Planning Process

1. State-level Planning and Analysis
   - Schedule a kick-off planning meeting with the Professional Development Project Manager (for qualifying Tier 1 and Tier 2 states)
   - Consult with selected Subject Matter Experts, currently Dr. Chris Dede or Dr. Punya Mishra (for qualifying Tier 1 and Tier 2 states)
   - Consult with Professional Development Specialists (for qualifying Tier 1 and Tier 2 states)
2. Build a Plan
   - Establish Goals and Objectives
   - Survey HP MLTI participants to assess technology readiness and needs
     - Partners in Learning School Research – survey for school level technology use and needs
     - Teaching with Technology – survey and assessment for needs by individuals
   - Select professional development options
   - Coordinate delivery implementation with Project Manager and Professional Development Specialist (for qualifying Tier 1 and Tier 2 states)
3. Identify Workshop Attendees
   - Train-the Trainer Workshops
     - Establish regional teacher trainer cadres
   - Leader-Led Workshops
     - Identify mentor educator teams
     - Identify innovation leader teams
4. Professional Development Year 1 Rollout
5. Evaluation
   - Year 1 Review
   - Year 2 Planning
   - Repeat for subsequent years

Key components of the HP PDP include:

1. The delivery of professional development through a blended model using both face-to-face and online methods.
2. Sustainability and capacity through the thoughtful variety and depth of professional development offerings.

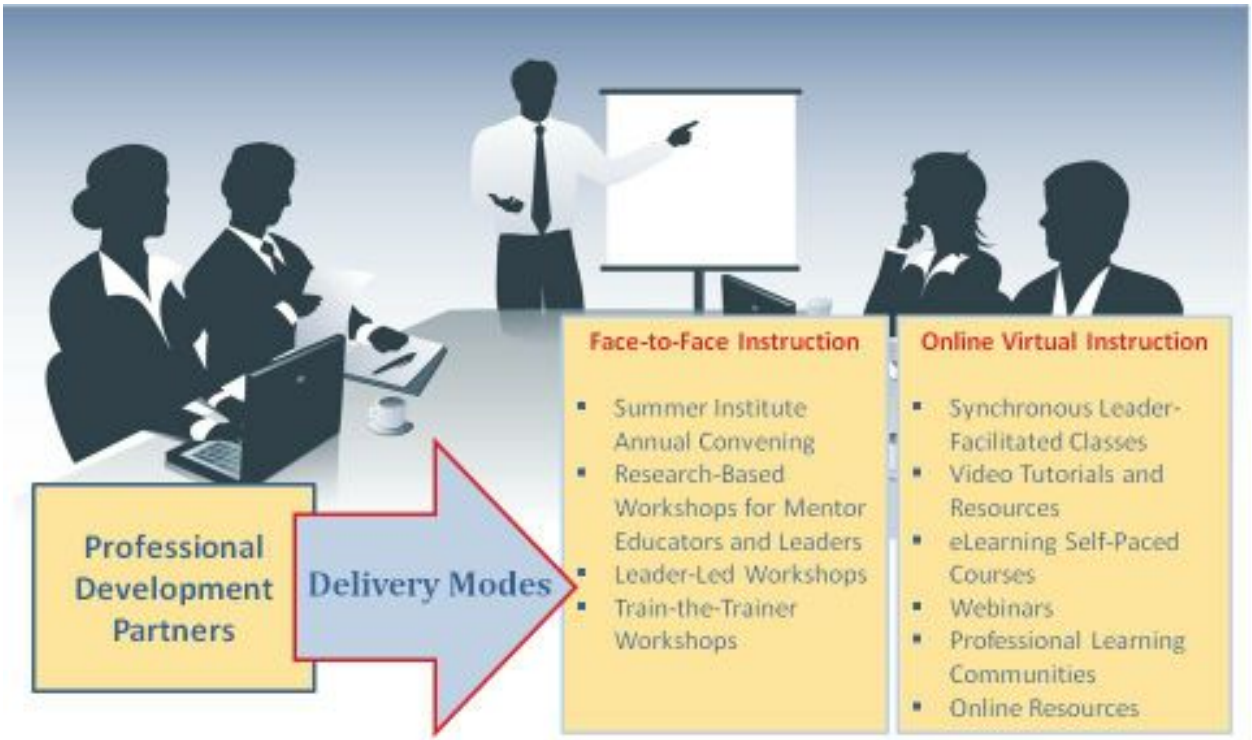
- A very high level of train-the-trainer professional development making it extremely likely for a professionally trained mentor expert to be available at a local level building strong capacity into the plan.
- Ongoing professional development over the four years supporting sustainability.
- A wealth of online resources that can be used at any time to expand the educator's comfort, knowledge and skills in a 1:1 environment providing for both ongoing capacity and sustainability.

3. Development of regional and state networks of support through professional learning communities (PLCs) which will connect educators so they may collaborate, share and learn from each other. Microsoft provides the Microsoft Partners in Learning Network PLC and Intel provides the Intel Engage PLC.

Delivery Modes

HP understands that educator and leader adoption of technology and skill levels may vary widely especially in the effective use of technology for instruction, transforming learning and engaging students. One or two options may not meet the needs of all educators and leaders within a state so HP has carefully selected a robust variety of professional development offerings. These offerings not only meet the learning needs of novice to experienced technology users but also provide a selection of professional development opportunities to ensure sustainability and support expanding various educator and leader capabilities around effective instruction for teaching and learning in a 1:1 environment.

Figure 3. Professional Development Delivery Modes



Working with the Department of Education

HP and its professional development partners recognize the importance of working in partnership with the Department of Education (DOE) in each qualifying Tier 1 and Tier 2 state to develop a professional development program that meets the unique needs of each state. In order to successfully design a customized state program under the direct supervision of the DOE which fully utilizes the professional development resources offered, HP and its partners have provided the following specific resources to Tier 1 and Tier 2 participating state leaders based on qualifying purchases of 10,000 HP units or more:

Consulting with Subject Matter Experts

In collaboration with Microsoft, HP is offering state-level consulting with recognized leaders such as **Professor Punya Mishra** and **Professor Chris Dede**. Each of these nationally-recognized and authoritative education leaders offers tremendous experience as well as research-based knowledge about effective integration of technology with instruction. Once a contract is awarded, recognized leaders such as these will work with each Tier 1 and Tier 2 state with qualifying levels of purchases to assist them in formalizing their PDP.

- **Professor Punya Mishra** – Dr. Punya Mishra is professor of Educational Technology & Educational Psychology at Michigan State University where he directs the Master of Arts in Educational Technology, Program. He is former chair of the Innovation and Technology Committee of the American Association of Colleges of Teacher Education, as well as co-chair of the 2011 annual conference of the Society of Information Technology in Teacher Education. His research has focused on the role of technology in teaching, teacher knowledge, creativity and design. The Technological Pedagogical Content Knowledge (TPACK) Framework for teacher knowledge for technology integration (co-developed with Dr. Matthew J. Koehler), has been described as being "the most significant advancement in the area of technology integration in the past 25 years." In addition to his TPACK knowledge, Dr. Punya Mishra has knowledge on creativity and 21st century skills as connected to content knowledge and has extensive experience in designing online environments for teacher professional development. His vita is included in HP Appendix D.
- **Professor Chis Dede** – Dr. Chris Dede is the Timothy E. Wirth Professor in Learning Technologies at Harvard's Graduate School of Education. From 2001-2004, he also served as Chair of the Learning & Teaching department in the School. His research interests span emerging technologies for learning, educational policy, and leadership in educational innovation. He co-edited Scaling Up Success: Lessons Learned from Technology-based Educational Improvement, Online Professional Development for Teachers: Emerging Models and Methods and most recently Digital Teaching Platforms: Customized Classroom learning for Each Student. Dr. Chris Dede has extensive experience in planning and substantial knowledge about online professional development. His vita is included in HP Appendix D.

Professional Development Specialists

HP, in collaboration with its professional development partners, will identify professional development specialists to work with each Tier 1 and Tier 2 state to coordinate and schedule the leader-led professional development workshops as well as work with the state to assist with the implementation of the PDP. The PDP has multiple partners and programs and HP recognizes that all programs may not be required for all participants.

Once a contract is awarded, we will work with each Tier 1 and Tier 2 state with qualifying levels of purchases to assist them in formalizing and scheduling a customized PDP that will meet each state and/or region's specific professional development needs.

Aligning with MLTI Teacher Practice and Technology Integration Models

HP understands that MLTI has adopted the Substitution, Augmentation, Modification, Redefinition (SAMR) model to provide teacher guidance on how to plan out the integration of technology into their classrooms and what to expect for different levels of technology use and the Technological, Pedagogical, Content Knowledge (TPACK) model that defines what teachers need to know to execute their plans effectively. McREL, Intel, Microsoft and Atomic Learning professional development partners have aligned their workshops and tutorials to these models and some of the Partners in Learning program components offered by Microsoft have been designed under the guidance of Professor Punya Mishra who is one of the co-developers of the TPACK. He is quoted below:

> *"The TPACK framework has increasingly been a crucial part of the efforts of the broader Microsoft Partners in Learning initiatives. I have been part of the ongoing conversations regarding this. Most specifically, the influence of the TPACK framework can be seen in the Teacher Education Initiative (TIE). I have been a key member of this project which has involved establishing a series of professional development workshop modules for several content areas, developed in collaboration with some of the top teacher educators in the nation. The TPACK framework is the foundation on which these modules are constructed. This emphasis and understanding of the importance of thinking of content, pedagogy and technology in coordination has significant promise in meeting the needs of developing the next generation of teachers and teacher educators who can meet the demands of 21st century learning."*
>
> — Dr. Punya Mishra, Professor and Director
> Master's Program in Educational Technology, College of Education
> Michigan State University

Annual MLTI Summer Institute for Participating States

As a multi-state initiative, HP recognizes the value of establishing a common venue for sharing best practices and experiences from the MLTI program. Now that the program has expanded beyond Maine and could include eight or possibly more states, logistical issues may inhibit leaders from each state to collaborate on an ongoing basis.

To that end, HP and its partners propose to host annual summer institutes, affording states an opportunity to share experiences and best practices, as well as discuss emerging trends in educational technology. On a rotating basis, HP, Microsoft and Intel will host this event at their headquarters or major operations center (e.g. Palo Alto, CA, Redmond, WA or Herndon, VA) to provide a day-long event to be designed with state leaders from all participating program states.

In addition to discussions and presentations by the member states, this will serve as an annual opportunity to engage in discussions with the partner companies delivering the 1:1 services and professional development.

It will also be an opportunity for those companies to showcase the latest technology trends and emerging products, to help member states consider future technology needs as they plan for the years ahead.

Further, provided approval through local state regulations, HP and its partners will work within SLED requirements to ensure compliance with state and local regulations; within those regulations HP and its partners will offer to pay the travel costs for two (2) leaders per state to attend the summer institute. Payments will be limited to $3000.00 per person which shall include economy class airfare travel. Each state can opt to send up to five (5) additional representatives for the summer institutes at their own expense.

Building a Comprehensive Plan

HP's professional development offering provides a sustainable, comprehensive and cohesive plan that builds capacity to reach the educator, leader and technology administrator stakeholders for the MLTI. The plan has a rich offering of professional development services including state-level services, face-to-face workshops for educators, leaders and technology support personnel, leader-facilitated online classes, online courses, professional learning communities and a broad array of online resources all designed to provide many delivery options to reach the targeted stakeholders.

Table 30. Cumulative Values for Tier 1 and Tier 2 States Participating in this NASPO Agreement

Professional Development Type	Any Quantity	10,000 Units	30,000 Units	70,000 Units
State Level Professional Development				
Professional Development Project Management		Yes	Yes	Yes
Professional Development Specialist		Yes (.25 FTE)	Yes (.50 FTE)	Yes (1.0 FTE)
Subject Matter Expert Consulting such as Dr. Punya Mishra or Dr. Chris Dede (Select One)		3 Days (Each Year)	5 Days (Each Year)	9 Days (Each Year)
Educator Professional Development				
Using Technology with Classroom Instruction that Works for Mentor Educators		4 Workshops* (3 Days Each)	12 Workshops* (3 Days Each)	28 Workshops* (3 Days Each)
Microsoft Innovative Educator (MIE) Program with Windows in the		6 Workshops* (3 Days Each)	14 Workshops* (3 Days Each)	32 Workshops* (3 Days

Professional Development Type	Any Quantity	10,000 Units	30,000 Units	70,000 Units
Classroom Or Intel Transforming Learning with 1:1 Course: Learning with One to One				Each)
Intel Transforming Learning with 1-1 Course: Student Engagement with One to One		Yes	Yes	Yes
Atomic Learning Integrate	Yes	Yes	Yes	Yes
Atomic Learning Mobilize	Yes	Yes	Yes	Yes
ClassLink Turnkey Training on LaunchPad		10 Online Facilitated (½ Day Each)	30 Online Facilitated (½ Day Each)	70 Online Facilitated (½ Day Each)
Intel Teach Elements Series	Yes	Yes	Yes	Yes
Intel Education	Yes	Yes	Yes	Yes
Common Sense Media K-12 Digital Literacy and Citizenship Program	Yes	Yes	Yes	Yes
Microsoft Digital Literacy	Yes	Yes	Yes	Yes
Microsoft Partners in Learning School Research	Yes	Yes	Yes	Yes
Common Sense Media Learning Ratings for Educators	Yes	Yes	Yes	Yes
Microsoft Partners in Learning Network	Yes	Yes	Yes	Yes
Intel Engage Community	Yes	Yes	Yes	Yes
Leadership Professional Development				
McREL Balanced Leadership for Selected Leaders		4 Workshops* (2 Days Each)	8 Workshops* (2 Days Each)	20 Workshops* (2 Days Each)

Professional Development Type	Any Quantity	10,000 Units	30,000 Units	70,000 Units
McREL Managing Change for Selected Leaders Follow-up Workshop		4 Workshops* (2 Days Each)	8 Workshops* (2 Days Each)	20 Workshops* (2 Days Each)
Intel Teach Elements Series: Educational Leadership in the 21st Century	Yes	Yes	Yes	Yes
Intel Teach Elements Series: Collaboration in the Digital Classroom	Yes	Yes	Yes	Yes
Atomic Learning Integrate	Yes	Yes	Yes	Yes
Atomic Learning Mobilize	Yes	Yes	Yes	Yes
Common Sense Media K-12 Digital Literacy Program	Yes	Yes	Yes	Yes
Microsoft Digital Literacy	Yes	Yes	Yes	Yes
Microsoft Partners in Learning School Research	Yes	Yes	Yes	Yes
Common Sense Media Learning Ratings for Educators	Yes	Yes	Yes	Yes
Microsoft Partners In Learning Network	Yes	Yes	Yes	Yes
Intel Engage Community	Yes	Yes	Yes	Yes
Technology Administrators				
HP Technical Professional Development		2 Workshops* (2 Days Each)	4 Workshops* (2 Days Each)	10 Workshops* (2 Days Each)
ClassLink System Overview	Yes	Yes	Yes	Yes
*Workshops are proposed to be spread across the four-year contract term				

It is important to note that HP strongly recommends investing in professional development as professional development is a critical factor in the successful implementation of any 1:1 initiative. In addition to the matrix of services included with the MLTI offering listed above, HP has provided pricing for optional professional development services and we encourage all participants to enhance their professional development program by utilizing these optional services.

Creating Program Capacity and Local Train-the-Trainer Incentive

The PDP is designed to have the capacity to reach all educators, leaders and technology support personnel through offering a wide variety of online and face-to-face professional development offerings and utilizing a train-the-trainer model. For Tier 1 and Tier 2 states, the train-the-trainer model is especially important as it creates the ability for professionally trained mentor experts to be available at a local level building strong capacity into the plan. In order to incent mentor teachers to participate in the train-the-trainer model, we will provide stipends for trainers to deliver up to two local professional development two-day workshops. In this model a state purchasing 70,000 may have 240 trainers who would receive a stipend when they conducted local training. This model not only provides incentive for mentor teachers to become trainers, but also provides investment in the local community supporting a positive economic impact.

Proposed Professional Development Schedule – Year 1

ENA, in collaboration with HP, has worked with the professional development partners to develop a very comprehensive professional development plan (PDP) that focuses on the crucial elements outlined under Methodology in Section 10.

The plan brings together consulting, workshops, courses, classes and online resources from all the partners. It is important to note that professional development is provided over the four-year term of the contract. We have included a proposed Year 1 Professional Development Schedule in Table 32 below with the understanding that we will work with each Tier 1 and Tier 2 state with qualifying purchases to develop a customized program.

Table 31. Proposed Professional Development Schedule – Year 1 2013

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
State Level Professional Development				
Professional Development Project Management (For Qualifying Tier 1 and Tier 2 States)	Meet with State Department of Education for a kick-off planning meeting Identify Professional Development Specialist Work with Professional Development Specialist and partners to manage planned Spring, Summer, Fall Training for Educators, Leadership and Technology groups	Work with Professional Development Specialist to review and revise (if necessary) Summer and Fall schedules Oversee and manage professional development partners participating in Summer training roll out plan	Work with Professional Development Specialist to review and revise (if necessary) Fall schedules and begin planning for Year 2 Oversee and manage professional development partners participating in Fall training roll out plan Begin working with HP and other partners to organize Summer Institute locations, agenda, schedule, attendees and communication plan	Meet with State Department of Education, Professional Development Specialists for program evaluation Finalize plans for Summer Institute with HP and other partners
Professional Development Specialist (For Qualifying Tier 1 and Tier 2 States)	Work with eligible states to establish goals and objectives for the state's professional development plan Engage Subject Matter Experts	Work with regional locations to assure program needs Review and evaluate needs for Summer and Fall programming Consult with eligible	Schedule, plan, assign locations and attendees to Summer Institute Define Agenda and attendees for the Institute	Meet with State Department of Education for program evaluation Finalize plans for Summer Institute

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
	Select professional development options Identify criteria for Leadership Level and Train the Trainer cohort Assist in identification of Train-the-Trainer and Leadership Teams throughout state Map out, schedule and plan State and Regional Training Plan Support Spring Training for Educators, Leaders and Technologists	states for any revisions to Summer and Fall programs	Schedule, plan, assign and manage attendees and PD Program Offerings Work and communicate with regional and district trainers Review and evaluate needs for continued PD programming	
Subject Matter Expert Consulting with experts such as Dr. Punya Mishra or Dr. Chris Dede (Select One for Qualifying Tier 1 and Tier 2 States)	Consult with State Leaders on developing their Year 1 professional development program			Consult with State Leaders on developing their Year 2 professional development program

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
Educator Professional Development				
McREL Using Technology with Classroom Instruction that Works for Mentor Educators (For Qualifying Tier 1, 2 and 3 States)	Select Mentor Educators to attend workshop	Conduct the 2-day workshop hosted at selected regional sites	Conduct follow-up 1-day workshop	Select Mentor Educators to attend second round of workshops in Years 2, 3 or 4.
Microsoft Innovative Educator (MIE) Program with Windows in the Classroom (For Qualifying Tier 1, 2 and 3 States) Or (Select Strand) **Intel Transforming Learning with 1:1 Course: Learning with One to One** (For Qualifying Tier 1, 2 and 3 States)		Conduct the 3-day workshop hosted at selected regional sites		Select Train-the-Trainer Educators to attend second round of workshops in Years 2, 3 or 4
Intel Transforming Learning with 1:1 Course: Student Engagement with 1:1 (For Qualifying Tier 1, 2 and 3 States)	Select Train-the Trainer Educators to attend the workshop	Take the eLearning course		Select Train-the-Trainer Educators to attend second round of workshops in Years 2, 3 or 4
ClassLink Turnkey Training on LaunchPad (For Qualifying Tier 1, 2 and 3 States)	Select Train-the Trainer Educators to attend the workshop	Conduct the ½ day remote workshop		Select Train-the-Trainer Educators to attend second round of

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
				workshops in Years 2, 3 or 4
Atomic Learning Integrate **Atomic Learning Mobilize** **Intel Teach Elements Series** **Intel Education** **Intel Engage Community** **Common Sense Media K-12 Digital Literacy and Citizenship Program** **Common Sense Media Learning Ratings for Educators** **Microsoft Digital Literacy** **Microsoft Partners in Learning School Research** **Microsoft Partners in Learning Network** (Available to all HP MLTI Participants)		Always available online self-paced tutorials, courses, and professional learning communities	Always available online self-paced tutorials, courses, and professional learning communities	Always available online self-paced tutorials, courses, and professional learning communities
Leadership Professional Development				
McREL Balanced Leadership for Selected Leaders (For Qualifying Tier 1, 2 and 3 States)	Select Leader representatives to attend workshop	Conduct the 2-day workshop hosted at selected regional sites		Select Leader representatives to attend second round of

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
				workshops in Years 2, 3 or 4.
McREL Managing Change for Selected Leaders Follow-up Workshop (For Qualifying Tier 1, 2 and 3 States)	Select Leader representatives to attend workshop		Conduct the 2-day workshop hosted at selected regional sites	Select Leader representatives to attend second round of workshops in Years 2, 3 or 4.
Atomic Learning Integrate **Atomic Learning Mobilize** **Intel Teach Elements Series: Educational Leadership in the 21st Century** **Intel Teach Elements Series: Collaboration in the Digital Classroom** **Intel Education** **Intel Engage Community** **Common Sense Media K-12 Digital Literacy and Citizenship Program** **Common Sense Media Learning Ratings for Educators** **Microsoft Digital Literacy** **Microsoft Partners in Learning School Research** **Microsoft Partners in Learning**		Always available online self-paced tutorials, courses, and professional learning communities	Always available online self-paced tutorials, courses, and professional learning communities	Always available online self-paced tutorials, courses, and professional learning communities

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
Network (Available to all HP MLTI Participants)				
Technology Administrators				
Technical Professional Development (For Qualifying Tier 1, 2 and 3 States)	Select Technology representatives to attend workshop	Conduct the 2-day workshop hosted at selected regional sites		Select Technology representatives to attend second round of workshops in Years 2, 3 or 4.
ClassLink System Overview	Systems Overview training for Technology Administrators	Systems Overview training for Technology Administrators	Systems Overview training for Technology Administrators	
Atomic Learning Integrate **Atomic Learning Mobilize** **Intel Teach Elements Series** **Intel Education** **Intel Engage Community** **Common Sense Media K-12 Digital Literacy and Citizenship Program** **Common Sense Media Learning Ratings for Educators**		Always available online self-paced tutorials, courses, and professional learning communities	Always available online self-paced tutorials, courses, and professional learning communities	Always available online self-paced tutorials, courses, and professional learning communities

	Spring 2013	Summer 2013	Fall 2013	Spring 2014
Microsoft Digital Literacy **Microsoft Partners in Learning School Research** **Microsoft Partners in Learning Network** (Available to all HP MLTI Participants)				
As proposed, professional development offerings are intended to be spread across the four-year contract term. Exact schedule and offerings will be determined in consultation with state leaders in qualifying Tier 1 and Tier 2 states and with district leaders in qualifying Tier 3 states.				

10.1.1. Maine Transition Support

While many of the professionals in Maine schools have many years of experience in MLTI schools, the depth of knowledge and the application of innovative practices vary greatly. Nonetheless, the Department recognizes that the next MLTI solution will require a certain level of basic training regardless of the platform or device. The Bidder must address in its proposal how it plans to transition Maine schools from the existing MLTI solution to its solution. This should include supporting teachers with the migration of files in format that have been created using software included in the current MLTI solution to compatible formats in the Bidder's solution. See **Appendix E, State Profiles – Maine** for a list of software titles included in the current MLTI solution.

Response:

HP and its professional development partners recognize that a level of basic training will need to be provided for both new participants and existing participants. For that reason, we have provided the following professional development offerings that will provide this basic level of training as well as assist educators in migrating compatible files. Please see Reviewing Maine's Legacy Software and Transition Options section below for a mapping of software titles from Appendix E.

1. Microsoft Windows in the Classroom – This train-the-trainer workshop will include an introduction to Windows component which will assist educators to fully understand and utilize the Windows operating system. Educators migrating files from the existing MLTI solution to the HP solution will also benefit from these workshops.
2. Atomic Integrate – From the "how-to" to "how-to-apply," Atomic Integrate includes training suited for beginners to advanced users. The training includes step-by-step assistance that guide users through how to use technology - from understanding how to use a program to how to perform specific tasks such as saving files in different applications.

Reviewing Maine's Legacy Software and Transition Options

Further, HP has reviewed the list of current software used, as stated in the State of Maine's Request for Proposals. These applications have been categorized by functionality/subject area, whether or not the application is also offered in Windows format, and in the event that specific software is unavailable, offered are some likely alternative applications to provide similar or more superior learning environments.

As outlined in the chart below, most of the legacy software titles previously used can be easily replaced with Microsoft Office, Adobe Digital School Collection and readily available Windows compatible software titles.

Table 32. Maine's Legacy Software and Transition Options

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
Business	JA Titan		Yes		http://titan.ja.org web based

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
					simulation games
Music	iTunes	10.5.3	Yes		
Music	Garageband	6.0.4	No	Adobe Audition, Cakewalk Sonar X2 or Cakewalk Music Creator 6.0 (low cost)	Music editing and recording software
Productivity	Address Book	5.0.3	No	Microsoft Outlook	Contact database, now called Contacts in Mountain Lion
Productivity	iCal	4.0.4	No	Microsoft Outlook	
Productivity	iChat	5.0.3	No	Microsoft Lync, Yahoo IM, Google Chat	
Productivity	Keynote	5.1.1	No	Microsoft PowerPoint	
Productivity	Mail	4.5	No	Microsoft Outlook or web-based email	
Productivity	OmniFocus	1.9.4	No	Microsoft Outlook, or Microsoft Project	
Productivity	OmniOutliner	3.10.3	No	Microsoft Excel	
Productivity	Pages	4.1	No	Microsoft Word	
Productivity	TextEdit	1.6	No	Microsoft Word	Simple text editing, Microsoft Word provides superior experience

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
Productivity	Write Room	2.5.2	No	Microsoft Word	Writeroom provides full screen writing environment. Just use Microsoft Word in full screen mode for same result
Reference	Encyclopedia Britannica	10	Yes		
Reference	Overdrive Media Console	1.1	Yes		www.overdrive.com
Reference	OmniDictionary	2.0.4	No	www.dictionary.com	
Web sites offer same functionality					
Simulation	Wolfquest		Yes		www.wolfquest.org
STEM	Data Studio	2012	Yes		PASCO stopped producing DataStudio software and migrated to PASCO Capstone, all their programs run in Windows environment (www.pasco.com/datastudio)
STEM	Geogebra	4.0.21	Yes		
STEM	Google Earth	6.2.0.590.5	Yes		
STEM	Grapher	2.1	Yes		Advanced Grapher 2.1 for Windows from Alentum Software
STEM	Logger Pro	3.8.4.2	Yes		Data recording tool from Venier

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
STEM	Maine Explorer	1.0.3	Yes		www.simbio.com
STEM	SketchUp Pro	8.0.11751	Yes		www.sketchup.com
STEM	Geniquest		Unknown		Created by Center for Genome Dynamics specifically for Maine's old laptop program
STEM	Calculator	4.5.3	No	Graphing Calculator 3D by Runitor	free 3D software, provides common calculator GUI interface, no training needed
STEM	Omni GraphSketcher	1.2.1	No	Graphing Calculator 3D by Runitor	Free 3D software, provides common calculator GUI interface, no training needed
Utility	Cyberduck	4.2.1	Yes		www.cyberduck.ch instant FTP tool
Utility	Democracy	1	Yes		Now called Miro, free software
Utility	1 to 1 Back Up	3.2	Unable to find	PC Backup	Dozens of backup software titles to choose from
Utility	ClamXav	2.2.2	No	Microsofft Security Essentials	Free Virus checking software, minimal technical training needed, Microsoft is also free and provides assistance is device gets infected
Utility	DVD Player	5.4	No	Choice of many free DVD player applications	No training required

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
Utility	Mac OS X	10.6.8	No	Microsoft Windows 7 or 8	
Utility	Time Machine	1.1	No	PC Backup	Dozens of backup software titles to choose from
Utility	VoiceOver	3.5	No	Microsoft Narrator built into Windows	
Utility	iSync	3.1.2	N/A		iSync was removed from Mac OS X starting with version 10.7
Visual	Acrobat Reader	10.1.2	Yes		
Visual	Adobe Digital Editions	1.8.1	Yes		
Visual	Comic Life	1.54	Yes		www.comiclife.com
Visual	ProfCast	2.6.5	Yes		www.profcast.com
Visual	QuickTime Player X	10	Yes		
Visual	Scratch	1.4	Yes		http://scratch.mit.edu
Visual	Photo Booth	3.0.3	Unable to find	Spark Booth	Photo booth kiosk software www.sparkbooth.com
Visual	Acorn	3.2	No	Adobe Photoshop Elements or Photoshop.com	
Visual	iDVD	7.1.2	No	Adobe Premiere Elements	
Visual	iMovie	9.0.4	No	Adobe	

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
				Premiere Elements or freeware like EZVid	
Visual	iPhoto	9.2.1	No	Adobe Photoshop Elements or Photoshop.com	
Visual	OmniDazzle	1.1.1	No	Adobe After Effects or freeware like Easy Green Screen	screen effects (www.photoshopgreenscreen.com)
Visual	OmniGraffle	5.3.6	No	Diagraming functions found in Microsoft Word and PowerPoint	
Visual	Preview	5.0.3	No	Adobe Acrobat	
Visual	Perian	1.2.3	N/A		www.perian.org - site indicates they have ceased operations
Web	Firefox	3.6.13	Yes		
Web	iWeb	3.0.4	No	Microsoft Expression Web	
Web	OmniWeb	5.11.1	No	Microsoft Internet Explorer, Google Chrome	
Web	Safari	5.1.3	No	Microsoft Internet Explorer,	

Category	Name	Version	Available in Windows Format	Alternate Windows Application(s)	Description/Details
				Google Chrome	
Unknown	Zon		unable to find		

10.2. Curriculum Integration Professional Development

10.2.1. Educator Professional Development

The integration of technology into teaching and learning processes remain the keystone to any 1:1 program. The Provider will develop and deliver professional development materials and opportunities for educators throughout the term of the Agreement to support the effective integration of the solution into teaching and learning. Bidders must address how it plans to provide professional development opportunities to educators throughout the State. The Department has recognized many challenges over the past decade of implementing Maine's 1:1 program and providing professional development to educators including:

- Heterogeneous skills and experience using technology among the educators. While the program has been in place for over a decade and the base skills and capacities of teachers may be stronger overall than other large populations in other places, there still exists a wide variability among them.
- The need for greater understanding of how a 1:1 program can facilitate student-centered teaching and learning. The Department recognizes that one barrier to the high-level integration of 1:1 technology is the need for greater understanding of the ways such technology can support a student-centered approach to teaching and learning.
- Many teachers have "tech skills" but lack the teaching and management skills necessary to leverage those skills. The Department recognizes that technology-use skills do not necessarily result in effective technology-empowered teaching and learning. Too often, "technology integration" is done a very basic level, leaving unrealized the potentially transformative power of a 1:1 approach.
- Lack of availability of substitute teachers limits participation. For face-to-face opportunities during the school day, the Department has found that it is difficult to host large sessions with teachers in a single school or a single region because in many areas, there are not enough substitute teachers to provide coverage while the teachers are participating in the professional development opportunity.

The Department has provided synchronous and asynchronous online professional development opportunities including online classes, webinars, and podcasts. While each has been viewed as effective for some, the Department also recognizes that like students, the learning styles and comfort of teachers is varied.

The Provider will provide an appropriate amount of educationally relevant professional development training for teachers and other school personnel as identified by the school to support the most effective use of the Provider's solution. The Bidder must describe its professional development plans to address the challenges identified by this RFP as well as anticipated challenges identified by the Bidder. Professional development plans must include enough detail to be tangible and comprehensible to the evaluation team including proposed numbers of opportunities, proposed location(s), proposed format (in-person workshop, webinar, podcast, etc), recommended length, materials included, proposed topics, proposed instructor to participant ratios, qualifications of instructors, etc.

The Bidder must separately and specifically address its first year program that will make available sufficient teacher professional development prior to the start of school year 2013-2014 to support the introduction of the Provider's solution. Training times and opportunities should be convenient to the participating personnel, and school personnel should have multiple options to signup for opportunities.

Response:

HP understands the objective of the MLTI is to realize the potentially transformative power of a 1:1 environment resulting in effective technology-empowered teaching and learning. As outlined in Dr. Chris Dede's book, *Digital Teaching Platforms*, successful 1:1 implementations achieve second-order change versus first-order change. First-order change is where schools utilize technology to do old things in new ways. First-order changes are not historically effective in improving student achievement. They lead to some improvements, but are not transformative. Second-order change is where schools do new things in new ways. "Although second-order change can appear challenging, some types of second-order change have the transformative power that educators have been seeking since the microcomputer revolution began." An example of second-order change he provides is the change from teacher-centered to student-centered learning which is one of the core priorities of Maine's Education Strategic plan, "Education Evolving: Maine's Plan for Putting Learners First." The PDP that HP partners have developed for MLTI educators and leaders is designed to achieve second-order change in 1:1 environments.

Educator Professional Development Deliverables

The comprehensive professional development programs offered in HP's PDP are described below. HP understands that educator and leader adoption of technology and skill levels may vary widely. HP has carefully selected a robust variety of professional development offerings that not only meet the learning needs of novice to experienced technology users but also provide a selection of offerings to address the challenges identified in the RFP plus others identified in the research conducted by Project Red. Project Red is a national research and advocacy organization that conducts national studies on technologies and student achievement focusing on 1:1 implementations. For additional information, please visit www.projectred.org. In addition to providing information about each professional development offering, the chart below also identifies what challenges the professional development offering overcomes.

Detailed information on each program is provided in HP Appendix D— Professional Development Partners and Programs and qualifying purchases are outlined in Table 31 in Building a Comprehensive Plan section.

The following table outlines the professional development offerings for educators.

Educator Professional Development		Delivery Mode and Duration	Challenges Addressed						
			Heterogeneous Skills	Student-Centered Approach	Technology-Empowered Teaching and Learning	Professional Development Delivery Options	Building Leadership Capacity	Second-Order Change	Transition Support and Technical Implementation
Professional Development Offering/Host Organization	**Summary Description**								
Using Technology with Classroom Instruction that Works **McREL**	Research-based and targeted professional development on both technology integration and quality instructional strategies. These workshops are TPACK and SAMR aligned. Provides tools, applications, and websites that will allow teachers to use the technology provided in the MLTI to reshape the way they teach. Increases teacher ability to create a student-centered environment in the classroom. Fosters the development of teaching and management skills needed to leverage technology skills.	Face to Face (F2F) 2 +1 Days	✓	✓	✓	✓			
Microsoft Innovative Educator (MIE) Program with Windows in the Classroom	Program to train the trainers to scale out the best practice uses of technology in the classroom focused on project based learning and maximizing productivity. Includes Windows in the Classroom training which will assist educators to fully understand and utilize the Windows 8 operating system.	F2F 3 Days	✓		✓	✓	✓	✓	✓

Microsoft									
Intel Transforming Learning with 1-1 Course: Learning with One to One **Intel**	The Intel Transforming Learning with 1-1 Program helps teachers re-engineer practices to become proficient in a 1-1 e-learning environment. This train-the-trainer workshop helps educators design instruction in a one to one setting with curriculum mapping, creating activities using Web 2.0 tools and sustained technology support.	F2F 3 Day	✓	✓	✓	✓	✓	✓	
Intel Transforming Learning with 1-1 Course: Student Engagement with One to One **Intel**	The Intel Transforming Learning with 1-1 Program helps teachers re-engineer practices to become proficient in a 1-1 e-learning environment. Participants explore characteristics of engaged learners by taking advantage of the authentic, real-world tools in a one to one learning environment. eLearning course, online or CD-Based, free facilitation materials.	Online 40 Hours	✓	✓	✓	✓	✓	✓	
Atomic Integrate **Atomic Learning**	Atomic Learning's signature solution providing training and integration on software applications.	Online 24x7 Time Varies	✓		✓	✓	✓		✓
Atomic Mobilize **Atomic Learning**	Provides professional development necessary to plan, implement, and revitalize successful initiatives that bring portable technology and learning together.	Online 24x7 Time Varies	✓	✓	✓	✓	✓		✓

Turnkey Training on LaunchPad **ClassLink**	Train-the-trainer remote professional development focusing on using LaunchPad in the Classroom.	Online Leader Facilitated½ Day	✓		✓	✓			✓
Intel Teach Elements Series Includes the Following Courses: • **Project-Based Approaches** • **Assessment in 21st Century Classrooms** • **Collaboration in the Digital Classroom** • **Thinking Critically with Data** **Intel**	Just in time e-learning courses that provide educators with flexible professional development opportunities supporting integration of technology in schools. These e-learning courses are designed to support a schools professional learning community. The content can support facilitated discussion and reflection on key educational topics that support effective use of technology in schools. The Intel Teach Elements courses align well to the TPACK model.	Online 24x7 20 Hours Each	✓	✓	✓	✓	✓		
Intel® Education: Free Tools and Resources to Help Students Develop 21st	Online tools create active learning environments where students can engage in discussions, analyze information, pursue investigations, and solve problems. Also included are teaching resources, including lesson plans, assessment strategies, and technology-enriched project ideas for all K–12 subjects.	Online 24x7 Time Varies	✓	✓	✓	✓			

Century Skills **Intel**									
K-12 Digital Literacy and Citizenship Program Including: • **Common Sense 1:1 Essentials Program** • **Online Professional Development** • **Parent Media Program** • **Student Curriculum** **Common Sense Media**	Common Sense Media proposes to continue its highly successful state wide Digital Literacy and Citizenship program model we are currently implementing in Maine, where over 75% of schools are using our resources. Common Sense Media's 1:1 Essentials Program will provide school administrators, teachers, and parents with a robust behavioral roadmap for rolling out a successful 1:1 student program. The program goals are threefold: (1) to offer a customizable, six-month game plan that would prepare a positive school community climate for 1:1 program implementation by teaching to building digital literacy and citizenship skills (2) to provide guidance, advice, and actual resources to introduce, inform, and familiarize both educators and families with the changes that 1:1 devices bring to traditional classroom practices. (3) to provide the necessary, onboarding digital citizenship and literacy curricular resources that students need in order to make safe, responsible, and respectful choices with their new devices.	Online 24x7 20+ Hours	✓	✓	✓	✓	✓		
Digital Literacy: Microsoft	This curriculum, available online or offline, helps educators develop a fundamental understanding of computers and productivity software. The courses help them learn the essential skills to begin computing with confidence.	Online 24x7 Time Varies	✓		✓	✓			✓

Teaching with Technology **Microsoft**	Teaching with Technology offers a self-assessment to identify learning gaps, 36 hours of eLearning content, summative assessments, a range of consolidation learning activities and tutorials as well as an optional valid and reliable assessment of educator competencies via the Microsoft Certified Educator Exam	Online 24x7 36 Hours	✓		✓	✓			✓
Partners in Learning School Research **Microsoft**	Online survey sent out by a school administrator to school leaders and teachers to gain their individual self-assessments of innovative teaching practices in their school and in their own classes.	Online 24x7 Time Varies	✓		✓	✓			
Learning Ratings for Educators **Common Sense Media**	Common Sense Learning Ratings for Educators is a credible, unbiased tool for educators to discover, curate, use, and share the best digital media products for use in learning. In addition, Learning Ratings will help educators connect to other educators to share information on how they use digital learning products in the classroom. Currently, ratings and reviews are available now for more than 1,000 mobile applications, games, and websites, with 2,000 expected by the end of 2013. In addition to assessments of individual products, Common Sense's editors compile special recommendations by age, subject or Common Core skill to help teachers identify the products that best meet student's learning needs. http://www.commonsensemedia.org/about-us/our-mission/about-our-ratings	Online 24x7 Time Varies Available August 2013			✓	✓			

Partners in Learning Network **Microsoft**	Educator and Leader Network to access free resources, tutorials, collaborative professional learning communities and obtain online webcasts and materials. www.pil-network.com	Online 24x7 Time Varies	✓		✓	✓			
Intel Engage Community **Intel**	Global online network of educators dedicated to educational improvement. Supports core concepts of 1 to 1 in use of technology, instructional design, project-based approaches, assessment of 21st Century Skills, open-ended questioning and networking. http://engage.intel.com/welcome	Online 24x7 Time Varies	✓	✓	✓	✓			

10.2.2. Leadership Professional Development

Leadership at all levels is critically important to the success of a 1:1 program. The Department wishes to strengthen and build the capacity of its educational leaders including principals, superintendents, curriculum coordinators, technology directors, and other key personnel. Today's educational leaders need to be able to embrace technology as a tool for transforming teaching and learning, and need to lead their schools and school systems in more fully realizing that transformational power. The Department has found, however, that technology is sometimes viewed by education leaders as an extra or an add-on, rather than the transformative tool it has the potential to be. The Department recognizes training leaders to embrace and be advocates for this kind of change is a wide-ranging and open-ended challenge. Bidders must describe how it plans to address the development of this kind of leadership capacity in the schools empowered by the Bidder's solution.

Professional development plans must include enough detail to be tangible and comprehensible to the evaluation team including proposed numbers of opportunities, proposed location(s), proposed format (in-person workshop, webinar, podcast, etc), recommended length, materials included, proposed topics, proposed instructor to participant ratios, qualifications of instructors, etc.

The Bidder must separately and specifically address its first year program that will make available sufficient leadership professional development prior to the start of school year 2013-2014 to support the introduction of the Provider's solution. Training times and opportunities should be convenient to the participating personnel, and school personnel should have multiple options to signup for opportunities.

Response:

Leaders play a significant role in the successful implementation of 1:1 projects. The 2010 Project Red survey identified nine implementation factors that correlate to successful educational outcomes. Of the nine success factors, two are directly attributed to leaders.

They include:

1. Integrating technology classes into every intervention class period
2. Implementing change-management leadership by school principals
3. Practicing daily online collaboration by students
4. Integrating technology into the core curriculum at least weekly
5. Performing formative online assessments at least weekly
6. Having a low student-computer ratio
7. Taking frequent virtual field trips
8. Using search engines by student daily
9. Training principals in teacher buy-in, best practices, and technology transformed learning

The HP PDP has included a robust professional development offering designed specifically to help school leaders not only adopt and implement the technology for their own areas of responsibility, but also to understand what to know and plan for in 1:1 environments and how to best support and guide educators for successful outcomes.

The following table outlines the professional developments offerings for leaders.

Leadership Professional Development		Delivery Mode and Duration	Challenges Addressed						
			Heterogeneous Skills	Student-Centered Approach	Technology-Empowered Teaching and Learning	Professional Development Delivery Options	Building Leadership Capacity	Second-Order Change	Transition Support and Technical Implementation
Professional Development Offering/Host Organization	**Summary Description**								
Balanced Leadership for Technology Initiatives: An Overview **McREL**	This session focuses on six major research findings from McREL's meta- and factor-analyses on principal leadership. It also includes an introduction to the concept of shared leadership, balanced leadership, and the Balanced Leadership Framework® within the context of leading major instructional technology initiatives. The professional development session is driven by both best practices in school leadership and by best practices in instructional technology implementation and aligns with two components of the TPACK Model – Technological Knowledge and Pedagogical Knowledge.	Face to Face (F2F) 2 Days			✓	✓	✓	✓	
Managing Change	This session increases participants' knowledge about change and effective technological change leadership and helps leaders embrace changes related to integrating technology into their schools. *Managing Change* is based on McREL's findings that identified specific leadership	F2F 2 Days			✓	✓	✓	✓	

McREL	responsibilities associated with first- and second-order change. Participants learn how to initiate, monitor, and lead change effectively by applying McREL's four phases of change: *Create Demand*, *Implement Change*, *Monitor and Evaluate Change*, and *Manage Personal Transitions*.								
Intel Teach Elements Series: Educational Leadership in the 21st Century **Intel**	Educational Leadership in the 21st Century course is designed to support - educational leaders in their understanding of supporting educators in their effective use of technology. An Educational leader would also benefit from taking the Collaboration in the Digital Classroom where they can see how teachers can use technology to transform their classroom.	Online 24x7 20 Hours Each	✓	✓	✓	✓	✓		
Intel Teach Elements Series: Collaboration in the Digital Classroom **Intel**	Supports teachers and leaders in ensuring students have collaboration skills for the global economy.	Online 24x7 Time Varies		✓	✓	✓	✓		
Atomic Integrate **Atomic Learning**	Atomic Learning's signature solution providing training and integration on software applications.	Online 24x7 Time Varies	✓		✓	✓	✓		✓
Atomic Mobilize **Atomic Learning**	Provides professional development necessary to plan, implement, and revitalize successful initiatives that bring mobile technology and learning together.	Online 24x7 Time Varies	✓	✓	✓	✓	✓		✓

K-12 Digital Literacy and Citizenship Program Including: • **Common Sense 1:1 Essentials Program** • **Online Professional Development** • **Parent Media Program** • **Student Curriculum** **Common Sense Media**	Common Sense Media proposes to continue its highly successful state wide Digital Literacy and Citizenship program model we are currently implementing in Maine, where over 75% of schools are using our resources. Common Sense Media's 1:1 Essentials Program will provide school administrators, teachers, and parents with a robust behavioral roadmap for rolling out a successful 1:1 student program. The program goals are threefold: (4) to offer a customizable, six-month game plan that would prepare a positive school community climate for 1:1 program implementation by teaching to building digital literacy and citizenship skills (5) to provide guidance, advice, and actual resources to introduce, inform, and familiarize both educators and families with the changes that 1:1 devices bring to traditional classroom practices. (6) to provide the necessary, onboarding digital citizenship and literacy curricular resources that students need in order to make safe, responsible, and respectful choices with their new devices.	Online 24x7 20+ Hours	✓	✓	✓	✓	✓		
Digital Literacy: Microsoft	This curriculum, available online or offline, helps educators develop a fundamental understanding of computers and productivity software. The courses help them learn the essential skills to begin computing with confidence.	Online 24x7 Time Varies	✓		✓	✓	✓		✓
Partners in Learning School Research **Microsoft**	Online survey sent out by a school administrator to school leaders and teachers to gain their individual self-assessments of innovative teaching practices in their school and in their own classes.	Online 24x7 Time Varies	✓		✓	✓	✓		

Learning Ratings for Educators **Common Sense Media**	Common Sense Learning Ratings for Educators is a credible, unbiased tool for educators to discover, curate, use, and share the best digital media products for use in learning. In addition, Learning Ratings will help educators connect to other educators to share information on how they use digital learning products in the classroom. Currently, ratings and reviews are available now for more than 1,000 mobile applications, games, and websites, with 2,000 expected by the end of 2013. In addition to assessments of individual products, Common Sense's editors compile special recommendations by age, subject or Common Core skill to help teachers identify the products that best meet student's learning needs. http://www.commonsensemedia.org/about-us/our-mission/about-our-ratings	Online 24x7 Time Varies Available August 2013			✓	✓	✓		
Partners in Learning Network **Microsoft**	Educator and Leader Network to access free resources, tutorials, collaborative professional learning communities and obtain online webcasts and materials. www.pil-network.com	Online 24x7 Time Varies	✓		✓	✓	✓		
Intel Engage Community **Intel**	Global online network of educators dedicated to educational improvement. Supports core concepts of 1 to 1 in use of technology, instructional design, project-based approaches, assessment of 21st Century Skills, open-ended questioning and networking. http://engage.intel.com/welcome	Online 24x7 Time Varies	✓	✓	✓	✓	✓		

10.2.3. Technical Professional Development

The Provider will provide an appropriate amount of technical professional development to participating school and district technology support personnel. While the number of technology staff vary from school to school, the Provider should assume that each participating school has at least one assigned staff member to provide technology support. The Department assumes that over the course of the Agreement, that the technology provided in the solution and those systems, protocols, and tools necessary to support the solution will change as new versions of software are released or as upgrades or refinements are introduced. As such, the Department expects the Provider to provide technical training throughout the term of the Agreement designed to enable school and district technology support personnel to provide end-user, just-in-time, support, to troubleshoot the solution as necessary to leverage the support the Provider's solution, and to effectively manage the technical implementation challenges that are inherent in a large-scale implementation. The Bidder will describe the support and maintenance aspects of its solution in **Section 11, Support and Maintenance**.

Professional development plans must include enough detail to be tangible and comprehensible to the evaluation team including proposed numbers of opportunities, proposed location(s), proposed format (in-person workshop, webinar, podcast, etc), recommended length, materials included, proposed topics, proposed instructor to participant ratios, qualifications of instructors, etc.

The Bidder must separately and specifically address its first year program that will make available sufficient technical professional development prior to the start of school year 2013-2014 to support the introduction of the Provider's solution. Training times and opportunities should be convenient to the participating personnel, and school personnel should have multiple options to signup for opportunities.

In general, while the Department cannot require attendance of technology support personnel at professional development opportunities, based on historical attendance, the Department expects that virtually all technology support personnel will attend opportunities provided during the normal school year. If opportunities are provided during the traditional school summer break, the Department expects that technology support personnel from smaller and more rural schools are less likely to be available due to more limited employment terms.

Response:

HP will provide technical training services to address the following hardware and software as part of the overall HP solution to site support personnel responsible for installation/updating and troubleshooting the devices.

- The site support personnel training session can be delivered as instructor led via the internet or in a classroom setting. HP's response assumes a classroom setting for the interactivity and hands on for troubleshooting. This training session assumes the attendees have at least two years of experience troubleshooting Windows based devices and user knowledge of Windows 7 and Office 2010 (attending the webinars is an option). This training session will be up to two days in duration and is designed for the personnel responsible for set up, onsite troubleshooting and software updates. It will address common troubleshooting issues for the topics defined. It also includes the update framework for software updates and basic troubleshooting.

- Each session will be no more than two consecutive days in length
- Each session will be for up to a maximum of 15 attendees
- Attendees will have prior user experience/knowledge of Microsoft Windows 7 and Office 2010.
- Attendees will have at least 2 years Windows based PC set up, installation and troubleshooting skills and experience
- Training will be delivered instructor led in interactive and demonstration mode
- Attendees in Onsite sessions will be provided a student handout in the class
- The State will be responsible for securing and setting up the training rooms for each onsite session
- Each room needs to be equipped with at least 1 of each of the Elite Pad 900 devices and installed with the software being addressed in the training
- This course can also be delivered as instructor led via the web for remote sites. In these cases, the State would provide the phone, bridge and internet access for the attendees.

• Onsite training
  Audience: Tech support
  Duration: Up to 2 days
  Frequency: HP will provide up to 40 total sessions in year 1
  Topics include:
  - Troubleshooting Windows 7
  - Troubleshooting Office 2010
  - Install and set up Elite Pad 900
  - Push updates process overview
  - Installation/overview and troubleshooting tips for HP installed Software
  - Overview of the support process

To ensure success, attendees should have prior Windows XP or Vista and Office 2003 or 2007 experience. Registration, notification and scheduling of attendees are the responsibility of the State. HP does not allow videotaping or taping of our sessions. HP will provide a single web based file set for installation within the State network in either SCORM or executable format. Course updates are addressed separately in Section 11.

ClassLink LaunchPad

ClassLink provides Technical System Administration training on their LaunchPad solution for technology administrators and personnel via a free one hour remote training session. This training is focused on a system overview.

The following table outlines the professional development offerings for technology support personnel.

Technical Professional Development		Delivery Mode and Duration	Challenges Addressed						
			Heterogeneous Skills	Student-Centered Approach	Technology-Empowered Teaching and Learning	Professional Development Delivery Options	Building Leadership Capacity	Second-Order Change	Transition Support and Technical Implementation
Professional Development Offering/Host Organization	**Summary Description**								
HP Technical Training for Site Support Personnel **HP**	This session will provide technical support training on the following topics: Troubleshooting Windows, troubleshooting Office, install and set up of device, push updates process overview, installation/overview and troubleshooting tips for HP installed software and overview of the support process.	Face to Face (F2F) 2 Days	✓		✓	✓			✓
ClassLink System Overview	ClassLink provides Technical System Administration training for technology administrators and personnel via a free one hour remote training session. This training is focused on a system overview.		✓	✓	✓	✓			✓
Atomic Integrate **Atomic Learning**	Atomic Learning's signature solution providing training and integration on software applications.	Online 24x7 Time Varies	✓		✓	✓	✓		✓

Atomic Mobilize **Atomic Learning**	Provides professional development necessary to plan, implement, and revitalize successful initiatives that bring mobile technology and learning together.	Time Varies	✓	✓	✓	✓	✓		✓
Intel Teach Elements Series Includes the Following Courses: • **Project-Based Approaches** • **Assessment in 21st Century Classrooms** • **Collaboration in the Digital Classroom** • **Thinking Critically with Data**	Just in time e-learning courses that provide educators with flexible professional development opportunities supporting integration of technology in schools. These e-learning courses are designed to support a schools professional learning community. The content can support facilitated discussion and reflection on key educational topics that support effective use of technology in schools. The Intel Teach Elements courses align well to the TPACK model.	20 Hours Each	✓	✓	✓	✓	✓		

Intel									
Intel® Education: Free Tools and Resources to Help Students Develop 21st Century Skills **Intel**	Online tools create active learning environments where students can engage in discussions, analyze information, pursue investigations, and solve problems. Also included are teaching resources, including lesson plans, assessment strategies, and technology-enriched project ideas for all K–12 subjects.	24x7 Time Varies	✓	✓	✓	✓			
K-12 Digital Literacy and Citizenship Program Including: • **Common Sense 1:1 Essentials Program** • **Online Professional Development** • **Parent Media Program** • **Student Curriculum** **Common Sense**	Common Sense Media proposes to continue its highly successful state wide Digital Literacy and Citizenship program model we are currently implementing in Maine, where over 75% of schools are using our resources. Common Sense Media's 1:1 Essentials Program will provide school administrators, teachers, and parents with a robust behavioral roadmap for rolling out a successful 1:1 student program. The program goals are threefold: (1) to offer a customizable, six-month game plan that would prepare a positive school community climate for 1:1 program implementation by teaching to building digital literacy and citizenship skills (2) to provide guidance, advice, and actual resources to introduce, inform, and familiarize both educators and families with the changes that 1:1 devices bring to traditional classroom practices. (3) to provide the necessary, onboarding digital citizenship and literacy curricular resources that	24x7 20+ Hours	✓	✓	✓	✓	✓		

Media	students need in order to make safe, responsible, and respectful choices with their new devices.								
Digital Literacy: Microsoft	This curriculum, available online or offline, helps educators develop a fundamental understanding of computers and productivity software. The courses help them learn the essential skills to begin computing with confidence.	Time Varies	✓		✓	✓	✓		✓
Teaching with Technology **Microsoft**	Teaching with Technology offers a self-assessment to identify learning gaps, 36 hours of eLearning content, summative assessments, a range of consolidation learning activities and tutorials as well as an optional valid and reliable assessment of educator competencies via the Microsoft Certified Educator Exam	36 Hours	✓		✓	✓			✓

Partners in Learning School Research **Microsoft**	Online survey sent out by a school administrator to school leaders and teachers to gain their individual self-assessments of innovative teaching practices in their school and in their own classes.	Time Varies	✓		✓	✓	✓		
Learning Ratings for Educators **Common Sense Media**	Common Sense Learning Ratings for Educators is a credible, unbiased tool for educators to discover, curate, use, and share the best digital media products for use in learning. In addition, Learning Ratings will help educators connect to other educators to share information on how they use digital learning products in the classroom. Currently, ratings and reviews are available now for more than 1,000 mobile applications, games, and websites, with 2,000 expected by the end of 2013. In addition to assessments of individual products, Common Sense's editors compile special recommendations by age, subject or Common Core skill to help teachers identify the products that best meet student's learning needs. http://www.commonsensemedia.org/about-us/our-mission/about-our-ratings	Time Varies Available August 2013			✓	✓	✓		

Partners in Learning Network **Microsoft**	Educator and Leader Network to access free resources, tutorials, collaborative professional learning communities and obtain online webcasts and materials. www.pil-network.com	Time Varies	✓		✓	✓	✓		
Intel Engage Community **Intel**	Global online network of educators dedicated to educational improvement. Supports core concepts of 1 to 1 in use of technology, instructional design, project-based approaches, assessment of 21st Century Skills, open-ended questioning and networking. http://engage.intel.com/welcome	Time Varies	✓	✓	✓	✓	✓		

10.3. Ownership of Content and Curricula

All new professional development materials produced, including content and curricula, and audio/video recordings of live workshops, and provided by the Provider as a result of this RFP and the resulting Agreement, are owned by the Maine Department of Education. The Department will publish all content, curricula, and recordings under a Creative Commons Attribution license or other appropriate open license whenever possible, but reserves the right to do otherwise. The Bidder should acknowledge its understanding of this requirement and indicate its intent to comply.

Response:

HP

HP has read and respectfully advises that no transfer of ownership of any intellectual property will occur under this Agreement. Purchasing Entity grants HP a non-exclusive, worldwide, royalty-free right and license to any intellectual property that is necessary for HP and its designees to perform the ordered services. If deliverables are created by HP specifically for the Purchasing Entity and identified as such in the Order statement of work, HP hereby grants Purchasing Entity a worldwide, non-exclusive, fully paid, royalty-free license to reproduce and use copies of the deliverables internally.

Intel

Intel Education Trainings can be videotaped and shared. Intel owns the rights to the Intel Teach Elements Courses and the Intel Education Transforming Learning with One to One Series.

Microsoft

Microsoft Education Trainings can be videotaped and shared, provided that: (a) use of such recording shall be restricted to internal training purposes only,(b) Microsoft shall have approval over the final cut, and (c) no modifications shall be made to the final version approved by Microsoft. Microsoft shall own the rights to the Microsoft Education Trainings.

ClassLink

ClassLink Online Training Sessions can be recorded and along with ClassLink Training Materials be made available through the LaunchPad desktop for future access at no additional charge.

Common Sense Media

Terms of Use for Printed Curriculum Documents

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Our curriculum videos are made available under the Creative Commons license "Attribution-NonCommercial-NoDerivatives" (CC BY-NC-ND). This license imposes terms similar to those for our printed materials and users must also provide attribution and use for non-commercial purposes as indicated above. The difference is that under this license users may not create any derivative works from our videos. For details see http://www.commonsensemedia.org/about-us/our-mission/educator-programs/curriculum-terms-use

Atomic Learning

Existing training content and new content added on an ongoing basis (approximately every 45 days) are part of the general Atomic Learning training library available to subscribed users and owned by Atomic Learning. Custom content can be uploaded to the Atomic Learning site by the Maine department of education under the subscription granted through this RFP and remains the property of the Maine DOE to be shared with all designated users.

In the event that the Maine DOE chooses to have Atomic Learning create training videos or content to meet specific requirements, a professional service engagement will be entered into, with a defined statement of work the specifies content ownership.

11. Support and Maintenance

As part of the cost, the vendor will provide ongoing support to the schools for the duration of the agreement. Since the cost is to cover the full costs of deploying and supporting the solution, each Bidder must factor a full support package into its price. The components of such a full support package must include those components necessary to assure the Performance and Quality specifications are met continuously and that the solution is sufficiently supported at all times. The support package must include, but is not limited to: Help Desk; repair; preventative maintenance; licensing; fixes and updates for software, firmware, microcode; etc. A Bidder, depending upon its bid type, may need to include warranty, spares, and other items.

This support will include Help Desk or Support Center service available via 1-800 type access which includes staffing, tools and processes to meet the schools' support requirements including a system of dispatching, tracking, priority setting, reporting and escalation which ensure timely and satisfactory response and resolution. The Provider may also employ other communication systems for delivery of just-in-time support such as Internet audio chat, text chat, web forums, etc. School users of the Help Desk may be students, teachers, administrators, and technical coordinators. Bidders should note that technical assistance related to Internet connectivity is expected insofar as to help determine if the issue is related to the Bidder's solution or the school/home's Internet Provider. The Department expects the Provider to coordinate with the school ISPs to make support as seamless as possible. The Bidder will describe its Help Desk offering as well as its ongoing technical support provided for its proposed solution.

The Bidder will fully describe the process and plan that will be utilized whenever a break/fix event (both in-warranty and out-of-warranty) occurs within any aspect of the Provider's solution. This will cover the entire process of repairing or replacing a portable computing device or any of the solution infrastructure. The infrastructure will be defined as switches, servers, LAN devices, remote access devices or any other equipment provided by the vendor.

As part of its solution reliability strategy, the vendor may provide spare portable computing devices or other spare equipment, to be housed at the local school and configured to the school's specifications for use, while school-assigned devices/equipment are being repaired or replaced. The local quantity of spare portable computing devices should be based on the Bidder's experience with these devices in other, similar environments.

Response:

Please see full response provided in Section 11.1

11.1. Solution Support

Each Bidder must address—at a minimum—the items above, as well as the requirements of **Section 8, Performance and Quality**, in fully describing here its proposed support program to demonstrate that its approach will provide solid, effective support for the users of the solution.

Response:

HP is committed to continuing its history of providing excellent customer service through technology support services. HP's support program includes: Help Desk, repairs, preventative maintenance, licensing; fixes and updates for software, firmware, BIOS, and warranty hot-spares. HP embraces the opportunity to support the objectives of the MLTI Initiative. We will work closely with the participating states to roll out a robust support and maintenance infrastructure that meets the future fully integrated instructional classroom needs for its teachers and students.

HP's solution will combine portable computing and wireless equipment, managed services, and program management support with our partners to establish a stable, yet flexible, learning environment. HP's support program will be a shared delivery approach by utilizing the capabilities of our partners ENA, Black Box, Dynamic Edge and SMaRT Technology Services. Support teams are comprised of resources with the appropriate skillset and certifications to troubleshoot, resolve and escalate incidents and requests. The support teams have access to knowledge databases and technical articles that include specific troubleshooting steps, resolutions/workarounds and escalation procedures.

HP will implement and install a wireless infrastructure if requested, manage product shipments, and complete the installation to provide the core managed IT environment. For states that request it, wireless infrastructure will be deployed and maintained by HP's technical partner and subcontractor ENA. ENA will provide new cabling and the wireless infrastructure coverage for each classroom and in-school roaming. Resiliency and cross coverage of access points for the wireless infrastructure will allow for failover if an access point fails. ENA will provide onsite break/fix services if wireless unit failure cannot be resolved remotely.

As an option, HP can provide device deployment services at the district or school level should they be requested.

Our asset tracking solution will ensure that each schools IT department preserves control of this environment down to the individual user. Our best-practice software management processes will ensure the gold disk image, licenses and local configurations are managed efficiently and automatically. We will provide a full-service helpdesk integrated within a dedicated service helpdesk which is staffed with highly-trained professionals and employs industry based standards and best practices supporting schools in 1:1 environments. Our service support solution will be through a dedicated toll free number as well as an online web-based service center. This helpdesk provides proactive device monitoring and management as well as wireless network monitoring, health check and diagnostic tools. The help desk can also direct activities to provide full restore of software images as well as provide troubleshooting and problem escalation and tracking. Our repair facility will supply end user replaceable parts, hot swap units and will ensure rapid recovery from equipment failures.

Our solution provides for a four-year refresh leasing cycle or full purchase. It includes training for students and educators for each mobile unit shipped. We will work with the MLTI initiative to develop business rules addressing prioritization of support as required that will be built into the helpdesk solution.

Devices shall be asset tagged and pre-imaged through HP's Factory Express process and shipped with the approved State or district standardized gold image. Equipment will arrive directly from HP manufacturing to the school district ready for asset assignment and deployment.

After units are in the hands of the user there may be times when they need technical assistance. We have provided a single point of contact service desk, accessible via both phone and e-mail access. An expanded description of responsibilities of the service desk can be found below. The expectation is that the local education Technology Administrator on site will be the first point of contact for students and teachers in that location for the majority of the time. The HP support desk will be the next level of support for the Technology Administrator through a unified, dedicated toll free number for support of all wireless and portable devices and software and classroom application services for the MLTI initiative. Calls to this toll free number or emails to our support team will be efficiently and transparently routed to the appropriate support specialist for prompt assistance. Help desk specialists assigned to this toll-free support line will not reject calls from teachers or students, but will first confirm that they have discussed their issue with the local Technology Administrator, with the purpose of ensuring coordination of resolution activities, and then will provide support to the user directly if requested.

Service calls that cannot be corrected through this first level helpdesk will be routed to more senior remote technical resources or to the local Technology Administrator onsite to assist with reimaging or hot swapping replacement units. All actions from initial reporting to problem resolution will be tracked in a ticketing system.

Device reimaging shall be facilitated using local media (USB memory devices) provided to the Technology Administrators during the device deployment process and updated annually. Required Technology Administrator's involvement shall be limited to inserting the local media and following a short list of scripted steps to reimage the device.

End users should be advised that nothing stored on a device hard drive is recoverable. Application troubleshooting will often involve device reimaging and will result in the loss of all locally stored data.

Students and faculty will by advised to use the ClassLink LaunchPad collaboration and storage solution to store copies of all coursework or other important information. If a device fails or otherwise needs to be imaged, all local content will be unrecoverable. Service cases will be managed, monitored and reported on via a web-based service center. Failed units will be flagged "in repair" and removed from the individual's assignment record. New hot swap units will get scanned into the asset database and the student ID will be assigned to the hot swap unit. The repair centers will maintain parts in stock, and track failure rates in collaboration with the helpdesk solution to spot and resolve defect trends.

Failed units will be boxed up by the local Technology Administrator (preferably using box from replacement unit) and shipped back to the HP repair facility. HP will provide shipping boxes (if needed) and labels for these failed units. Units will be repaired and then returned to the hot spares inventory per district allocation and need. If the optional district accidental damage coverage or whole unit no-fault replacement service is purchased, this will include service coverage such as liquid spills and cracked screens and cases. HP will generate a syllabus for district-led parent/student involvement in and responsibility for the care of the portable computing devices. A write up on how we propose to implement this is included in the training matrix in the Professional Development Plan.

Software issues will be managed by the helpdesk and escalation will be managed back through the Software OEM if required. Patch and firmware solutions will be monitored, tested and managed as part of maintenance service.

HP will continue to monitor the entire support and maintenance process. Reports, case reviews and service process flow improvement methodologies will be provided through the life of this service award. HP and ENA will work closely with the primary customer(s) in each state on transformational changes to better integrate user friendly and efficiency improvements as technology tools and techniques mature.

Personal Information

Each party shall comply with their respective obligations under applicable data protection legislation. Neither HP nor ENA intends to have access to or require personally identifiable information ("PII") of our State of Maine Customer in providing services. To the extent HP or ENA has access to Customer PII stored on a system or device of Customer, such access will likely be incidental and Customer will remain the data controller of Customer PII at all times. HP or ENA will use any PII to which it has access strictly for purposes of delivering the services ordered.

In the performance of maintenance activities, exchange and replacement of systems between the students is accomplished at the school level and not by HP or its sub-contractors. Before shipment of systems to the depot for repair, if the district chooses to re-image, the system can be reimaged using local media provided by HP/ENA to wipe all student data.

HP/ENA will conduct this training during orientation. Disk wipe will be via reimaging of the machine. HP/ENA shall provide the technology director with a list of steps to follow to wipe each machine. These steps shall include nothing more complicated than entering command line instructions on the device.

Service Desk Responsibilities

The Service Desk functions as the Single Point of Contact and will provide Level 1 support for local resources to find the support required for applications (including ClassLink LaunchPad), hardware, wireless connectivity and image management under this proposal. Support will also include assistance with administrative functions available to local resources such as updates to the asset database, initiating the re-image process or managing hardware repairs. Remote control access within Dynamic Edge's provided LabTech RMM tool will allow service desk analysts to easily assistant technology consumers by walking them through a process and starting the re-image process to fully reset the device.

A single toll-free 800# will be provided to the Technology Administrator for all incidents and requests. Calls are routed to the correct support team through skill-based hunt groups within the automated call distribution system. Support requests may also be submitted via email or a self-service online portal.

The service desk is responsible for the following:

- Single Point of Contact: While there are multiple contact methods available (telephone, email, self-service), all incidents/requests are handled by the same team. This approach provides efficiencies in team work, communications and ensures properly trained personnel are responding to the request.
- Service Hours: Live support will be available to cover the hours of 6:00 AM to 10:00 PM, Monday to Friday, local time.
- Respond to Incidents/Requests: The service desk will troubleshoot and attempt to resolve the following high level issues. Incidents that cannot be resolved remotely will be escalated to the appropriate support team at ENA, SMaRT, Dynamic Edge, HP or other identified support team.
  - Application Issues: The service desk will provide assistance with ClassLink LaunchPad application and program support services, including error messages and how-to questions.
  - Hardware Issues: For both warranty and non-warranty devices, the service desk will provide triage to determine the indication of a hardware issue and will assist with escalation of a ticket, providing assistance with swapping the device with an inventory of local spares. In this case, an incident will be opened to complete the repair on the defective device.
  - Wireless Connectivity: The service desk will utilize tools provided by ENA to quickly determine network status to assist with isolating the source of the issue. The team can provide device configuration assistance for connectivity issues or will quickly escalate issues affecting multiple users to ENA for further corrective actions, which may include interacting with the local ISP or dispatching a local representative to conduct onsite testing or equipment swap.
  - Image Management: The service desk can remotely start a reimage of a device when it's required. Issues related to images that are not resolved at the first level of the help desk will be escalated to Dynamic Edge.
- Maintain Ownership: The service desk maintains ownership of all incidents/requests they process. This ownership includes providing status updates upon request as well as monitoring open incidents throughout their life cycle to ensure nothing is overlooked.

Technical Training Support

During the contract term, if process or software updates are implemented that have a direct impact on the training described in section 10.2.3, HP will update the existing training content and provide the State with a single web based course for use within the State for IT support personnel. Development of new courseware or added or upgraded software is not within this scope.

District Responsibilities

HP will require each State or district to be responsible for the physical deployment and updating of the asset assignment data for each portable computing device handed out to students, teachers or administrators. This will include asset database updates to add or delete assignments when hot spares are used to resolve failures. Districts will be required to provide secure storage and management of onsite hot spares and end user replaceable parts. HP is open to optional solutions to offset concerns around district responsibilities.

11.2. Service and Support Plan

As part of the Project Plan, the awarded Provider will provide a complete Service and Support plan. Each Bidder will acknowledge here its responsibility to do so should it become the Provider.

Response:

HP understands the requirement to provide a complete Service and Support plan within 60 calendar days after the contract is awarded, however we believe we will be ready to deliver this plan within 30 calendar days. This plan will be developed in collaboration with our partners ENA, SMaRT, Dynamic Edge, and Black Box.

12. Project Management and Implementation

The Provider must ensure a successful implementation for each of the participating sites. This includes necessary site surveys, validation testing, installation and configuration of all hardware and software, training, support program implementation and any other aspects of the solution necessary. The following requirements are associated with this requirement and schedule.

Response:

HP acknowledges and understands.

12.1. Project Plan and Deliverables

The Provider will develop and implement a project plan that includes, as a minimum, the following deliverables. Failure to submit the required plan in accordance with this timetable may result in termination, liquidated damages, or delayed payment to the Provider. Each Bidder must describe its ability to meet these requirements:

Response:

HP fully understands the requirements for publishing a Project Plan meeting the States requirements within 30 calendar days after contract award. The Project Plan will be written to meet or exceed the States requirements and will work with the State and participating Districts to accomplish. HP's Project Management processes are in line with Project Management Institute standards and will meet the requirements.

12.1.1. Project Plan

The preliminary Project Plan itself will be delivered for approval not later than 30 calendar days after the Agreement is approved by the State Purchases Review Committee. Development of the plan with the Department's involvement is required. The Plan must include all aspects of the project and its deliverables, including coordination with the Department and the schools, communications and reporting, timetable, Validation Testing Subplan, Deployment Subplan, Professional Development Subplan, and the Service and Support Subplan. This Project Plan will be revised and improved periodically as needed, subject to approval by the Department.

Response:

HP acknowledges and understands. HP will finalize and submit a project plan within 30 calendar days of contract award as we engage with the State. Our Plan will be developed in coordination with the Department and the schools and will include communications and reporting, a timetable, a validation testing subplan, a deployment subplan, a professional development subplan and a service and support subplan. HP understands that the project plan, after initial presentation, will be revised and improved periodically as needed and will be subject to the approval of the Department.

12.1.2. Validation Testing

This will be system testing, in participating schools, that confirms that the solution meets or exceeds the functional requirements, and the performance and reliability specifications as required under the Agreement between the Provider and the Department resulting from this procurement process. This Validation Test will enable the Provider the opportunity to test its equipment in school environments and will assure the Department that the solution is acceptable for production deployment. The test will include up to five (5) schools and must be successfully completed by July 19, 2013.

Response:

HP's project plan will include a validation testing subplan. The purpose of this subplan component will be to confirm that the solution meets or exceeds the functional requirements of the Agreement resulting from this procurement process which shall be based on our response to this RFP and the RFP itself. We anticipate that we will test in at least 5 schools to confirm that the solution is acceptable for production deployment in a school environment and we also anticipate that the validation test will be completed by July 19, 2013.

12.1.3. Educational Conferences

Participation in at least twenty (20) educational conferences or meetings annually in conjunction with the Department, the intent of which is to help inform the educational community of the project plans and to maintain communication and ongoing relationships with the participating schools. These conferences may begin as early as June 2013.

Response:

HP and its partners in this response understand that we will be requested to participate in conjunction with the Department in at least 20 educational conferences or meetings each year, starting perhaps as early as June 2013. We understand that the purpose of these meetings and/or conferences will be to inform the educational community of the project plans and to maintain communication and ongoing relationships with the participating schools.

12.1.4. Implementation

The Provider must successfully install, configure and test all hardware and software for each participating site. In School Year 1 this must be completed by August 23, 2013.

The Provider will install cabling for its solution and its connection to the school's local network. At the Provider's discretion, they may utilize existing cabling in the schools. If done, the Provider must agree to warranty those parts of the local infrastructure that they utilize as they would newly installed equipment. The local school will arrange for electrical work based on the Provider's specifications. Local construction, abatement and other costs are the responsibility of the school. As part of the installation, the Provider will provide an overview to the local technical coordinator of the resulting network and train the person(s) in the basics of system/network operation and support.

Each school installation will include provision of complete, current documentation necessary for effective and successful use of the solution by people such as system administrators, site support personnel, and teachers. This may include manuals, guides, quick reference materials and other documentation. Electronic versions are required. Each Bidder will describe what documentation they will provide and how they will provide it in order to be effective.

Each installation will include establishment of a site work completion and satisfaction sign-off form. The Provider's equipment and work at each site will not be considered complete nor will it be paid for until satisfaction sign-offs are obtained from both the responsible site person and the Department's Agreement administrator.

Response:

HP acknowledges and understands.

12.1.4.1. <u>Maine Implementation</u>

Note that certain schools in Maine begin the school year in early August, and therefore those schools should have equipment installed and tested no later than July 26, 2013.

Response:

HP acknowledges and understands.

12.1.4.2. Hawaii Implementation

Note that nearly all schools in Hawaii begin the school year in late July, and therefore it would be preferable if those schools would have equipment installed and tested no later than June 26, 2013.

Response:

HP acknowledges and understands.

12.1.4.3. Vermont Implementation

Note that certain schools in Vermont begin the school year in early to mid-August, and therefore those schools should have equipment installed and tested no later than June 26, 2013.

Response:

HP acknowledges and understands.

12.1.5. Professional Development

Professional development for the solution must be provided for the participating schools' teachers, leadership, and technical support personnel as addressed in **Section 10, Professional Development, Curriculum Integration, and Consultation** of this RFP. Bidder will include a professional development subplan as part of the Project Plan.

Response:

HP acknowledges and understands. A draft professional development subplan for the first year has been included in Section 10 of this response, and we understand and agree that we will further refine the subplan in cooperation with the Department and other MLTI State leadership.

12.1.6. Support and Service

The Provider will deliver ongoing technical support to the schools (on site and remote) for the period of the contract for the Provider's solution and its integration into the schools' academic program.

Response:

HP acknowledges and understands.

12.1.7. Timeline

The Bidder will propose a timeline, consistent with the RFP requirements, that it will commit to for the implementation process, commencing from approval of the Agreement to completion of the first year implementation. The timeline should include all major phases and milestones.

Response:

HP agrees to commit to the first year implementation process, showing major phases and milestones, commencing upon approval of this Agreement. HP has included a draft version of the implementation process on the following pages. This draft assumes contract signature January 31 and would be adjusted to the actual signature date.

Figure 4. Project Plan Timeline

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessor	Resource Names	% Work Complete
1			*Contract Signature*	1 day	Thu 1/31/13	Thu 1/31/13			0%
2			*Kickoff Meeting*	2 days	Fri 2/1/13	Mon 2/4/13	1	ENA,HP,State of Maine	0%
3			Confirm communications plan - establish go-forward cadence						0%
4			Review and revise project plan						0%
5			Confirm owners, action items, follow up						0%
6			Confirm State of Maine role in decision-making, and define protocol						0%
7			Finalize District Opt-in terms and process with State of Maine						0%
8			Review current risk assessment and mitigation activities						0%
9			Maintain and update throughout project lifecycle						0%
10			Obtain existing blueprints/site drawings						0%
11			Identify preferred sequence of site installs						0%
12			Identify pilot site deployments						0%
13			Identify preferred sequence of site surveys to support install targets						0%
14			Determine final quantities, place final product orders	5 days	Mon 2/4/13	Fri 2/8/13			0%
15			Ongoing Project Meetings						0%
16			Internal vendor meeting (ongoing)		Fri 2/8/13			HP team	0%
17			Customer status meeting (ongoing - to assess deployment, training, service calls)		Fri 2/8/13			HP team & State of Maine	0%
18			HP Program Review (ongoing)		Thu 2/28/13			HP - internal	0%
19			HP Product delivery (actual delivery date TBD by need)	17 days	Fri 2/15/13	Mon 3/11/13		HP	0%
20			Develop Service Delivery handbook	8 days	Fri 2/15/13	Tue 2/26/13		HP	0%
21			Develop Issue Management and Escalation Process (internal & customer)	23 days	Fri 2/15/13	Tue 3/19/13		HP	0%
22			Create Invoicing and Payment Process	11 days	Fri 2/15/13	Fri 3/1/13		All - HP led	0%
23			Finalize Reporting Process and Initial Format	23 days	Fri 2/15/13	Tue 3/19/13		All - HP led	0%
24			Finalize Change Control Log	23 days	Fri 2/15/13	Tue 3/19/13		HP	0%
25			Develop Customer Acceptance Process and Document	11 days	Fri 2/15/13	Fri 3/1/13		HP & State of Maine	0%

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessor	Resource Names	% Work Complete
26			Confirm and complete site access badging requirements for all ENA and ENA managed resources	5 days	Fri 2/1/13	Thu 2/7/13		ENA	0%
27			Verify site access hours and advance notification process						0%
28			Conduct site surveys	30 days	Fri 2/1/13	Thu 3/14/13		ENA & State of Maine	0%
29			Determine # of classrooms, approximate classroom size and number of students per classroom						0%
30			Identify all instructional areas outside of classrooms where ENA Wi-Fi is required						0%
31			Verify established building codes/ordinances and any special site requirements regarding make ready work						0%
32			Obtain IP address(es) of local domain controller/radius/LDAP server(s)						0%
33			Plan AP distribution and placement (heat mapping)						0%
34			Document AP placement in each room (Take a picture of the end location).						0%
35			Determine mounting bracket needed for each AP.						0%
36			Determine the IDF/MDF switch each AP will need to connect to.						0%
37			Document the pathway the low voltage cable will follow - include rough footage.						0%
38			Include rough footage.						0%
39			Document the number of physical firewalls along wiring path between AP and IDF/MDF .						0%
40			Document ceiling height (drop ceilings).						0%
41			Plan POE switch placement relative to number of necessary ports and AP locations						0%
42			Document Switch placement in each IDF/MDF (Take a picture of the end location).						0%
43			Determine if there is rack space or how Switch will be mounted.						0%

ID		Task Mode	Task Name	Duration	Start	Finish	Predecesso	Resource Names	% Work Complete
44			Verify adequate electrical power availability – (Open 110V/220V AC & Adequate wattage availability for MAX POE draw of all APs that will use POE/POE+ per closet).						0%
45			Determine which IDF/MDF each switch will need to connect with.						0%
46			Verify Router location and configuration						0%
47			Document Router location (Take a picture of the end location).						0%
48			Determine if hardware or configuration change is needed to incorporate and connect new ENA						0%
49			Determine routing between WLAN(s) and other local area network resources						0%
50			Integrate ENA & subs support desk solutions	30 days	Mon 2/11/13	Fri 3/22/13		ENA & HP	0%
51			Finalize call flow options						0%
52			Document call handling procedures and handoffs						0%
53			Create site collateral (e.g. how to contact HP team for assistance)						0%
54			Complete and publish FAQs						0%
55			Complete staffing						0%
56			Train agents						0%
57			Build reports						0%
58			Wireless deployment (Deployment duration dependent on # of sites/Deployment options selected)	120 days	Fri 5/1/13	Thu 8/15/13		ENA	0%
59			Create school district wireless policy (includes SSIDs, authentication mechanism, and bandwidth allocation rules, if any)						0%
60			Install new hardware in on-site WAN/Internet router for additional Ethernet port for wireless LAN (if no port currently available)						0%
61			Install new POE switches and cabling for AP placement						0%
62			Install APs						0%
63			Acceptance Testing						0%

ID		Task Mode	Task Name	Duration	Start	Finish	Predecesso	Resource Names	% Work Complete
64			Verify all APs for location register properly with ENA cloud-based controllers and WI-FI management system						0%
65			Audit AP configuration, using ENA automated configuration management tools. Verify all APs located on particular campus load appropriate school district policy.						0%
66			Audit campus heat map with APs installed and operational to determine if any gaps in coverage exist, or if RF signal strength needs to be adjusted						0%
67			Random sample tests						0%
68			With MLTI portable device, verify authentication methodology (based on district choice)						0%
69			With MLTI portable device, verify bandwidth throughput to ENA network core via http://speedtest.ena.com. Monitor test at AP, district router, and core to identify bandwidth bottlenecks (if any)						0%
70			With MLTI portable device, verify ability to move between APs while maintaining session						0%
71			While on-site, purposely disconnect one AP and verify outage shows up in monitoring. Reconnect AP						0%
72			Verify network visibility and appropriate system access from MLTI portable device to local network resources (printers, on-line directories, file servers, etc.)						0%
73			*Complete Pilot Site Installations & Acceptance Testing*	10 days	Fri 3/1/13	Thu 3/14/13		ENA	0%
74			Document "lessons learned"; adjust process as/if required						0%
75			Review lessons learned document with customer stakeholders						0%
76			Develop reporting collateral	10 days	Mon 2/11/13	Fri 2/22/13		ENA	0%

ID		Task Mode	Task Name	Duration	Start	Finish	Predecesso	Resource Names	% Work Complete
77			Sites completed this reporting period and progress against full scope deployment						0%
78			Sites planned for completion this reporting period but still outstanding, including any causes for delay and mitigation plan, if applicable						0%
79			Sites planned for completion the next reporting period, and full scope completion target dates through project end						0%
80			Rolling project risk assessment with mitigation plan and current status						0%
81									
82			*BEGIN ENA PD DEVELOPMENT/DEPLOYMENT PLAN*						0%
83			State-level Planning and Analysis	40 days	Mon 2/4/13	Fri 5/29/13		ENA PD Project Manager	0%
84			Schedule a kick-off planning meeting with the Professional Development Project Manager (for	15 days	Mon 2/4/13	Fri 2/22/13		ENA PD Project Manager	0%
85			Consult with selected Subject Matter Experts, currently Dr. Chris Dede or Dr. Punya Mishra (for qualifying Tier 1 and Tier 2 states)	20 days	Mon 3/4/13	Fri 3/29/13		ENA PD Project Manager	0%
86			Consult with Professional Development Specialists (for qualifying Tier 1 and Tier 2 states)	20 days	Mon 3/4/13	Fri 3/29/13		ENA PD Project Manager	0%
87			Build a Plan	65 days	Mon 3/4/13	Fri 5/31/13		PD Specialist	0%
88			Establish Goals and Objectives	20 days	Mon 3/4/13	Fri 3/29/13		PD Specialist	0%
89			Survey HP MLTI participants to assess technology readiness and needs	65 days	Mon 3/4/13	Fri 5/31/13		PD Specialist	0%
90			Partners in Learning School Research – survey for school level technology use and needs					PD Specialist	0%
91			Teaching with Technology – survey and assessment for needs by individuals					PD Specialist	0%
92			Select professional development options	20 days	Mon 5/6/13	Fri 5/31/13		PD Specialist	0%
93			Coordinate delivery implementation with Project Manager and Professional Development Specialist (for qualifying Tier 1 and Tier 2 states)	20 days	Mon 5/6/13	Fri 5/31/13		PD Specialist	0%
94			Identify Workshop Attendees	45 days	Mon 6/3/13	Fri 8/2/13		PD Specialist	0%

ID		Task Mode	Task Name	Duration	Start	Finish	Predecesso	Resource Names	% Work Complete
95			Train-the Trainer Workshops	35 days	Mon 6/17/13	Fri 8/2/13		PD Specialist	0%
96			Establish regional teacher trainer cadres	35 days	Mon 6/17/13	Fri 8/2/13		PD Specialist	0%
97			Leader-Led Workshops	35 days	Mon 6/17/13	Fri 8/2/13		PD Specialist	0%
98			Identify mentor educator teams	35 days	Mon 6/17/13	Fri 8/2/13		PD Specialist	0%
99			Identify innovation leader teams	35 days	Mon 6/17/13	Fri 8/2/13		PD Specialist	0%
100			Professional Development Year 1 Rollout	35 days	Mon 6/17/13	Fri 8/2/13		PD Specialist	0%
101			Evaluation	20 days	Mon 1/6/14	Fri 1/31/14		ENA PD Project Manager	0%
102			Year 1 Review					ENA PD Project Manager	0%
103			Year 2 Planning					ENA PD Project Manager	0%
104			Repeat for subsequent years					ENA PD Project Manager	0%
105									
106			*BEGIN ENA & SUBS DEPLOYMENT PLAN*						0%
107			Requirements Discovery	38 days	Fri 2/1/13	Tue 3/26/13		ENA	0%
108			Meet with State to identify common configuration	2 days	Fri 2/1/13	Mon 2/4/13			0%
109			Meet with districts, if required, to identify customizations (app/settings)	21 days	Fri 2/1/13	Fri 3/1/13	108		0%
110			Document final image configuration(s)	3 wks	Fri 2/1/13	Thu 2/21/13	109		0%
111			Image Build	139 days	Fri 2/1/13	Wed 8/14/13		ENA & Subs	0%
112			Milestone - receive hardware and base manufacturing image sample from HP	0 days	Fri 2/1/13	Fri 2/1/13			0%
113			Milestone - Receive Applications/Licenses for Master Image	0 days	Fri 2/1/13	Fri 2/1/13			0%
114			Milestone - Receive District Custom Applications/Licenses	0 days	Fri 2/1/13	Fri 2/1/13			0%
115			Create Master Image	3.6 wks	Fri 2/1/13	Tue 2/26/13	108,112,1		0%
116			Create District Customizations/Task Sequences	10 wks	Mon 2/11/13	Fri 4/19/13	109,115,1		0%
117			Test Image / Task Sequence Install on Hardware	4 days	Tue 3/19/13	Fri 3/22/13	116		0%
118			Test Image / Task Sequence Install from USB Drive	2 days	Mon 3/25/13	Tue 3/26/13	117		0%
119			Test Image / Task Sequence Install from PXE Boot	2 days	Wed 3/27/13	Thu 3/28/13	118		0%
120			Test District / School Setup Process	5 wks	Tue 3/19/13	Mon 4/22/13	116		0%
121			Test HP Manufacturing Image Process	50 days	Mon 4/22/13	Mon 7/1/13			0%
122			Milestone - Deliver Master Image to HP Manufacturing	0 days	Tue 4/23/13	Tue 4/23/13	120		0%

ID		Task Mode	Task Name	Duration	Start	Finish	Predecesso	Resource Names	% Work Complete
123			Milestone - Receive Sample imaged hardware from HP Manufacturing	0 days	Tue 5/21/13	Tue 5/21/13	122FS+20 days		0%
124			Test Master image on sample machines (for Each District scenario)	5 wks	Tue 5/21/13	Mon 6/24/13	123		0%
125			Report bugs or supply image updates to HP and re-test	0 days	Tue 6/25/13	Tue 6/25/13	124		0%
126			Milestone - Send approval to HP Manufacturing	0 days	Tue 7/2/13	Tue 7/2/13	125FS+5 days		0%
127			Documentation & Training	50 days	Tue 1/1/13	Mon 3/11/13			0%
128			Create Documentation for ETD for imaging	2 wks	Tue 1/1/13	Mon 1/14/13	115		0%
129			Create Documentation for end users	1 wk	Tue 1/15/13	Mon 1/21/13	128		0%
130			Create online training/videos (?)	3 wks	Tue 1/22/13	Mon 2/11/13	129		0%
131			Deliver online training	4 wks	Tue 2/12/13	Mon 3/11/13	130		0%
132			Labtech RMM Account Configuration	51 days	Wed 5/15/13	Wed 7/24/13			0%
133			Create Labtech RMM Accounts and Groups for each District	3 wks	Wed 5/15/13	Tue 6/4/13	108		0%
134			Create and copy Global Policies	1 wk	Wed 5/15/13	Tue 5/21/13	133		0%
135			Create District specific policies	5 wks	Mon 5/20/13	Fri 6/21/13	134		0%
136			Create school specific policies	2 wks	Mon 5/27/13	Fri 6/7/13	135		0%
137			Ship devices from HP to district	10 days	Mon 7/15/13	Mon 7/29/13			0%

12.1.8. Project Staffing

An in-State experienced, qualified, and effective project team will be identified and provided, subject to approval by the Department's Agreement administrator. The Bidder will provide a description of its project staffing plan for all phases and tasks. Identify each senior staff member and complete for each the form in Appendix G in order to demonstrate your staff's experience with projects similar to this one. At a minimum, the Provider will maintain an in-State team for the length of the project made up of a Project Manager, Educational Specialist, Professional Development Specialists, and Technical Engineers sufficient to implement and support the program.

Response:

HP understands and will provide staffing positions defined above for the duration of the project. HP agrees to maintain an in-state team including Project Manager and Professional Development Specialist. HP takes exception to the requirement to provide in-state resources for the Educational Specialist and Technical Engineer positions.

At this time, HP anticipates the Educational Specialist position to be a part of the planned national HP project management office for this initiative. HP expects to fill and locate these positions in various centralized regional locations, preferably within states that are participating with this initiative.

Furthermore, HP anticipates a regional depot to support Maine, Massachusetts, New Jersey and Vermont to be located at our HP Andover, Massachusetts location. HP further anticipates a regional depot in Hawaii dedicated to Hawaii's deployment.

12.1.9. Coordination with Schools

The Provider will work with the Department and each school and its principal or principal designee to determine via any necessary site surveys the local requirements necessary to implement the solution as well as any local change requirements and costs, and will coordinate the installation of its solution with each school's changes. These local change requirements would include not only the basic solution but also any additions or adaptations that a school elects to implement at its own local cost (e.g., switches, hubs, software, hardware, adaptive devices).

The Provider must accommodate school schedules and needs, even if this requires some alteration of the Provider's customary schedule. Such accommodation must not include any additional, premium or overtime charges.

Response:

The HP Project Manager and Curriculum Development Manager will work with the State to coordinate with each school district basic time frames for deployment of infrastructure and then work with each school to meet those objectives. HP fully understands the demands on the schools from internal and external groups for the use the facilities and will work to ensure a schedule that meets the needs of the school as well as the requirements of the program. HP is prepared to perform some work after hours and weekends depending on the availability of the facility and staff to allow HP access into the areas we need to work in.

12.1.10. Work Within Schools

Each Bidder will succinctly describe the basic physical characteristics of the proposed equipment including dimensions, weights, electrical, HVAC and any other specifications vital to know. All required cables, wires, mounts and connectors will be specified by the Bidder.

All cabling, wiring, connectors and mounts will be installed in a manner which results in safe and secure facilities. No hazards will be created; any identified hazard will be pointed out to appropriate site or Department personnel. Installations must be performed in a manner which does not harm or diminish local site designs, structural integrity or – to the extent feasible – cosmetics. Installations will meet all prevailing local codes and governing body codes as well as IEEE, TIA/EIA and ISO/IEC standards for cabling and wiring.

- IEEE - Institute of Electrical and Electronic Engineers
- TIA/EIA - Telecommunications Industry Association/Electronic Industry Association
- ISO/EIC - International Organization for Standardization/Equipment Installer's Code

Response:

The wireless access points installed on premise as part of the ENA Air service are 6.7"L x 6.7" W x1.6" H. They weigh.36 kg. They will be installed either at the ceiling or higher than 7' above ground along a wall, and all installations will be safe and secure and designed not to harm or diminish local site designs, structural integrity, or cosmetics. All ENA Air installations provide both 2.4 Ghz and 5 Ghz wireless coverage and meet IEEE standards for both 802.11 b/g/n (2.4 Ghz) as well as IEEE 802.11 a/n (5 Ghz). The Power over Ethernet switches that will be installed as part of the ENA Air service are 17.4" W x 14.4" D x 1.75" H. They weigh 12.36 lbs and require input voltage of up to 240 VAC. All installed copper Ethernet cabling will meet or exceed TIA/EIA-568 Update A5 guidelines for Enhanced Category 5 (Cat 5e), and meet all local low voltage installation standards. Cabling will also be ISO/IEC 11801 compliant to support a maximum frequency of 100 Mhz for Category 5e.

12.1.11. Change Control

A change control process will be utilized. The Provider must ensure that system and site changes are implemented effectively, reasonably, are documented and scheduled — and must ensure good communication with those affected by the changes, both before and after the change.

Response:

HP has a well-established change control process which will be utilized to ensure that system and site changes are implemented effectively, reasonably and are documented and scheduled. Our process is time-tested and will ensure excellent communication with those affected by the change, both before and after.

12.1.12. Project Management Reporting

The Provider will submit on the last working day of each month a detailed monthly progress report to the Department's Project Manager, starting with the first month of the Agreement. Among other things, this report must include a monthly summary of the performance metrics specified earlier. The Provider may be requested to supply additional information as warranted.

Response:

HP's PMO will provide to State by the last workday in each week a report of the week's activities sortable by school and district, containing any and all deployment activities of portable computing devices and/or wireless installations. To be included in the report will be training activities with names or trainer, and number of attendees receiving the training. In addition, HP's PMO will provide updates on any outstanding program issues, procurement cycle updates, staffing changes, and a listing of any change requests and their current status.

HP's PMO will provide a monthly report to State with a complete listing of incidents, Device and system failure types, downtime, repair turnaround times, trends, remediation needed, unresolved issues, recommended improvements and other factors necessary to ensure a successful project.

12.1.13. Ongoing Improvements

Since the Department is vitally interested in investing in solutions which have long-life and upgradeability to provide continuing and enhanced capabilities over time, including migration to evolving standards, each Bidder must describe its solution's ability to adapt to or to incorporate improved technology. Fully describe how you would identify progressions in technology and integrate them into products previously installed at customer sites. Examples might be incorporation of an emerging wireless standard or upgrades to the core operating system and application software.

The Department is seeking a solution that adheres to industry standards and open systems architectures as versus proprietary solutions. Each Bidder must identify whether its solution includes proprietary aspects and, if it does, will provide in its proposal a schedule and a plan to the Department for the Provider's migration to industry standards - or state that it intends to continue pursuing its proprietary approach.

Response:

HP and its partners have proposed a solution that keeps up with the best technology available. We have described throughout our response in sections 6 (device and software) and 7 (wireless network) how we will adapt to incorporate new and improved technology throughout the life of our relationship. We have chosen industry standard equipment for our device, all included software and our wireless solution so to ensure that the Department and all MLTI participants will see the benefit of changing technologies as they are incorporated into our chosen solutions.

HP and its partners will meet with the Department and leaders of other MLTI state participants to discuss our technology roadmap annually and will seek both input and collaboration as we incorporate those changes within the MLTI.

Appendix G – Additional Forms – Staff Experience with Similar Projects

Instructions: Provide the following information to describe each senior staff member's experience with a similar project(s) – one form for each project. The information your firm provides will be used to evaluate your staff's experience with projects similar to the work described in this RFP. The Evaluation Team will also use the references your firm provides to verify the work.

Employee Name ____To be determined_____ Employee Position __Education Strategist, Americas_____

Firm Name ___Hewlett Packard Company_____

Name of Client: _____

Type of Entity: _____ Government_____School _____ Non-profit___ _____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____

2. Approximate dates of engagement: From _____ To _____

3. Describe the purpose and objectives of work.

4. Describe the nature of work performed.

5. Describe the employees' role relative to this client's project.

6. Describe the employees' role relative to this RFP.

In addition to state-level education strategists working on curriculum and transitions with key state officials, HP proposes to centralize the strategists so there is a degree of best practice sharing between participating states. HP would arrange internal meetings of its strategists monthly to review state-by-state progress, issues, challenges and results. Further, HP proposes hosting quarterly web conferences with the strategists and key state officials to maintain open lines of communication throughout the year (beyond the summer institutes previously discussed in Section 10.

The state-level strategists/specialists will also report to HP's Education Strategist for the Americas region. The Education Strategist and team collaborates with educational institutions across the Americas on comprehensive educational technology initiatives that foster 21st century skills, as well as assist with major HP customer academic initiatives around the world. A former school administrator and adjunct professor of communication, the Education Strategist holds undergraduate and graduate degrees from Hofstra University in New York.

The Education Strategist has won over 60 state and national awards in school public relations, delivers speeches on technology and communication in education nationwide, most recently the keynote speaker at the 2011 CCSSO National Conference on Student Assessment, is a past columnist for Electronic School, School Administrator and American School Boards Journal, and has been interviewed for many leading educational publications over his/her career.

Current Supervisor's Name: _____Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Employee Name ____To be determined____ Employee Position __TS Americas Transition Manager___

Firm Name __Hewlett-Packard Company_____

Name of Client: ____State of Maine MLTI Initiative_____

Type of Entity: X_____ Government_____School _____ Non-profit___ _____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____

2. Approximate dates of engagement: From _2/1/2013_____ To ___7/31/2013_____

3. Describe the purpose and objectives of work.

Successful deployment of portable computing devices to schools in participating states

4. Describe the nature of work performed.

Work with the PMO to transition the program from contract signing to steady-state service

5. Describe the employees' role relative to this client's project.

Transition project management

6. Describe the employees' role relative to this RFP.

Assist the Senior Project Manager with input to applicable sections of the RFP response

Current Supervisor's Name: _____ Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Employee Name ____To be determined____ Employee Position __TS Americas Transition Manager___

Firm Name __Hewlett-Packard Company_____

Name of Client: ____State of Maine MLTI Initiative_____

Type of Entity: X_____ Government_____School _____ Non-profit___ _____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____

2. Approximate dates of engagement: From _2/1/2013_____ To ___7/31/2013_____

3. Describe the purpose and objectives of work.

Successful deployment of portable computing devices to schools in participating states

4. Describe the nature of work performed.

Work with the PMO to transition the program from contract signing to steady-state service

5. Describe the employees' role relative to this client's project.

Transition project management

6. Describe the employees' role relative to this RFP.

Assist the Senior Project Manager with input to applicable sections of the RFP response

Current Supervisor's Name: _____ Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Employee Name ____To be determined____ Employee Position __HP Customs Operations Manager___

Firm Name __Hewlett-Packard Company_____

Name of Client: _____U.S. Department of Veterans Affairs_____

Type of Entity: _X_____ Government_____School _____ Non-profit___
_____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____300,000_____

2. Approximate dates of engagement: From _2/1/2008_____ To ___present_____

3. Describe the purpose and objectives of work.

Data Center Care and Data Storage network

4. Describe the nature of work performed.

Program management

5. Describe the employees' role relative to this client's project.

Senior Project Manager – Manage the PMO and Service operations

6. Describe the employees' role relative to this RFP.

Provided HP Technology Services input to applicable sections of the RFP

Current Supervisor's Name: _____ Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Employee Name ____To be determined____Employee Position __Professional Development Project Manager__

Firm Name __Education Networks of America, Inc. (ENA)_____

Name of Client: _____

Type of Entity: _____ Government_____School _____ Non-profit___ _____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____

2. Approximate dates of engagement: From _3/2013_____ To ___TBD_____

3. Describe the purpose and objectives of work.

The primary role of the Professional Development Project manager is to manage the various professional development partners and programs.

4. Describe the nature of work performed.

The Professional Development Project Manager is in charge of overseeing the planning, organization, implementation and control of the professional development resources offered by HP to qualifying MLTI participants ensuring the program is executed with a high degree of quality and customer satisfaction.

5. Describe the employees' role relative to this client's project.

See Item #6.

6. Describe the employees' role relative to this RFP.

The roles and responsibilities of the ENA Professional Development Project Manager includes, but is not limited to the following:

- Meet with State Department of Education to outline the goals and objectives of the professional development program
- Meet with the Professional Development Specialist to assist in the communication plan and creating a schedule of regional and district professional development programs
- Over site and collaboration of a state communication plan for the PD program offerings
- Review and management of professional development goals and objectives meeting scope, and quality review.
- Collaboration with State Department of Education, Professional Development Specialist, HP and professional development partners to evaluate and review programs for continuous improvement.

Current Supervisor's Name: _____ Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Employee Name ____To be determined____ Employee Position __Professional Development Specialist_

Firm Name __Education Networks of America, Inc. (ENA)_____

Name of Client: _____

Type of Entity: _____ Government_____School _____ Non-profit___ _____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____

2. Approximate dates of engagement: From _3/2013_____ To ___TBD_____

3. Describe the purpose and objectives of work.

The Professional Development Specialist will work closely with the State Department of Education, the Professional Development Project Manager and participating districts and schools in professional development program planning and in assuring a successful roll out of training programs for attendees.

4. Describe the nature of work performed.

The Professional Development Specialist will work within the state to assure quality training, review, access to professional development programs and support, and assessment of overall training and PD results.

5. Describe the employees' role relative to this client's project.

See Item #6.

6. Describe the employees' role relative to this RFP.

The roles and responsibilities of the Professional Development Specialist include, but are not limited to the following:

- Meet with State Department of Education, subject matter experts and Professional Development Project Manager to develop a professional development roll out plan
- Assess learning needs of the participating trainers, leaders and educators at the state, regional , local and district levels
- Develop and coordinate training schedules
- Communicate training opportunities, success, and results to state and districts
- Ensure quality delivery and access to the training programs for trainers, leaders, educators, and technology support personnel in partnership with state level representatives
- Maintain consistent records of program implementation, participation of attendees in professional development programs
- Review and adjust professional development program to meet changing needs and emerging educators
- Manage a schedule and registration process for professional development programs

Current Supervisor's Name: _____ Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Employee Name ____To be determined____Employee Position ___Network Engineer_____

Firm Name ___Education Networks of America, Inc. (ENA)_____

Name of Client: _____ENA will staff team members on the MLTI project who have had experience with other K-12 public school systems_____

Type of Entity: _____ Government___X_____School _____ Non-profit___ _____ For-Profit Private Sector

1. Approximate number of users on the client's system: _____

2. Approximate dates of engagement: From _____ To _____

3. Describe the purpose and objectives of work.

The primary role of the Network Engineer is to support the technical needs of MLTI participants and to maintain the highest levels of service availability, performance and growth all with the utmost respect, professionalism and courtesy.

4. Describe the nature of work performed.

The Network Engineer is in charge of implementing, supporting and maintaining existing network and solution architectures. This person provides escalation and design-level support for customer issues and coordinate third party vendor interaction to ensure prompt and professional resolution.

5. Describe the employees' role relative to this client's project.

See Item #6.

6. Describe the employees' role relative to this RFP.

The roles and responsibilities of the Network Engineer include, but is not limited to the following:

- Implement and support solution architectures with some design responsibilities as needed
- Administer and maintain existing network. Provide escalation support for customer issues and coordinate third party vendor interaction to ensure prompt and professional resolution
- Knowledge transfer, cross-training, and documentation in a group setting
- After-hours on-call support rotation

Current Supervisor's Name: _____ Phone Number: _____

Project Supervisor's Name*: _____ Phone Number: _____

* Name of supervisor(s) while working on the above Client project.

Appendix G – Additional Forms – Portable Computing Device Specifications Summary

Instructions: Complete this worksheet for each type of technology solution proposed. Fill in each blank with the requested information. You may attach additional pages to provide complete information where required. This bid does not require that all these fields be accounted for, but if a Bidder is providing an option that fits one of these categories, these fields must be completed. Please specify which items are optional, if any. If additional items (fields) need to be added to this list of products and services to best reflect your proposed solution, please make note of this and add any necessary data.

Network Connectivity

Network Connectivity

Wireless Type 802.11 a/b/g/n Speed Up to 150 mb

Wired Type Not Standard ____ Speed ____

Modem Type None_____ Speed _____

Portable Device(s)

Manufacturer HP_____ Processor Speed 1.8 GHz

Chip Manufacturer Intel_____ Chip Type Dual Core Atom

Random Access Memory

Chip Type Pop Capacity 2 GB

Data	**Type**	**Capacity**	**Speed**
Mass Storage	eMMC __	32 GB ___	20 Mbit/s(maximum) __
Optical Drive	Not Standard	_____	_____
Removeable Media	Micro SD	_____	

Audio Subsystem

Chipset Manufacturer SRS __ Model _____

Audio in Type(s) Digital Dual-Array Microphones – Headphone/Microphone Combo Jack

Audio out Type(s) Integrated Stereo Speakers

Video Subsystem

Chipset Manufacturer Intel Model Graphics Media Accelerator

VRAM Capacity Dynamic Ext. Output type HDMI

Monitor Display

Display Size 10.1" Characteristics WXGA (1280 x 800) 400 mit

Resolution 1280 x 800

Input

Keyboard Type Software Based Size N/A

Pointing Device Type (check all that apply)

Touch Pad_____ Acutrack_____

Roller Ball_____ External Mouse_____

Other Yes___ Explain Multi-Touch Capacitive Digitizer

Battery

Type Internal 2 Cell/External Duration Internal 10-12 hours/External 8-9 hours

Method of Charging AC Adapter Spare battery(y/n) Yes – Available for External Only

PowerSupply/Battery Charger

Integrated (y/n) No Separate (y/n) Yes

Alternate Power Source

The ElitePad can also be charged using the optional ElitePad Docking Station, ElitePad Smart AC adapter, or by using the optional charging carts. The included SmartJacket and external battery combo can be charged separately from the ElitePad.

Dimensions

Weight – Device only 1.52 lbs. Size 10.28 x 7.00 x 0.36 in

Carry Weight with Power Supply, Power Cord, required accessories and Carrying Case

The total solution offered is less than 3.5 lbs. The HP ElitePad 900 has a starting weight of 1.52lbs. Including HP's ElitePad Jacket and Expansion Jacket Battery the total weight is 2.39 lbs. HP will provide a Targus Sport Netbook Sleeve, CVR215 that weighs .44 lbs.

Accessories

A805410	APC Essential SurgeArrest 6 Outlet 2 FT
A856126	APC Essential SurgeArrest 6 Outlet 10 F
A888487	Belkin Anti Smudge Screen Protector 4PK
A855810	20CT Cleaning Wipes 3X Clean Supplies
A510609	ACM-70 Stereo Headphone 3.5MM Plug
A845820	ViewSonic PJD6223 Networkable XGA Projector
A842461	ViewSonic PLED-W500 Portable LED Projector
C0M84AA#ABA	HP ElitePad Docking Station
H4K08AA#ABA	HP ElitePad 10W A/C Adapter
H4R88AA	HP ElitePad Case
H4E45AA	HP Executive Tablet Pen
H4Q44AA#ABA	HP Slim BT Keyboard
H3T50AA#ABA	HP X4000b Bluetooth Mouse
H3N45AA	HP ElitePad HDMI/VGA Adapter
H3N46AA	HP ElitePad USB Adapter
H3N47AA	HP ElitePad Smart AC Adapter
H3N48AA	HP ElitePad SD Card Reader
H3N49AA	HP ElitePad Ethernet Adapter
H3N50AA	HP ElitePad Serial Cable
QL490AA	HP 30 Notebook Managed Charging Cart
QL488AA	HP 20 Notebook Charging Cart

Ruggedness

Fully describe features of all components (to include but not be limited to keyboard, laptop case, etc.) designed to withstand extensive use and possible abuse by students.

The HP ElitePad has enhanced durability with computer numerated control machined aluminum uni-body case. The device is made with 2nd generation Gorilla glass and mil-std. 810G tested.

The Targus 12" Sport Netbook Sleeve features a neoprene exterior to protect your netbook from scuffs. The soft handles provide a comfortable carry option. This slip case is designed to accommodate netbooks with up to 12" screens. Though slim and compact, the case includes storage for business cards, keys, pens and files. Featuring a sporty color combination, with durable neoprene materials and a padded shoulder strap, the Sport Netbook case is ideal when a lightweight, low-profile case is all you need.

Please describe other Portable Device specifications

Our HP Elite Premium phone support comes standard with every HP Elite PC. You will have your own US Based support 24x7 365 days a year.

The unit is “FULLY field serviceable” by any authorized service provider (ASP).

The ElitePad can be upgraded and/or serviced via our self-maintainer support program.

Appendix G – Additional Forms – Wireless Local Area Network (WLAN) Specifications Summary

Manufacturer Aerohive

Wireless Transmission Rate of	450	MB/sec at a range of 50 feet
	450	MB/sec at a range of 100 feet
	450	MB/sec at a range of 200 feet
Maximum Range of	750	feet

Full disclosure of the capabilities and limitations of the wireless technology proposed must be included such as interference between classrooms, distance and object penetration data, and susceptibility to interference from outside sources.

Although there are certainly variations is wireless performance due to distinctions between wireless access points from different manufacturers, ENA's experience has been that most access points that provide IEEE 802.11 a/b/g/n will suffer similar interference from infrastructure, construction materials, and outside sources. The difference with ENA Air managed wireless service, is that ENA constantly monitors wireless coverage, density and efficacy throughout the life of our service, and will make ongoing changes to the service implementation as required to optimize coverage and throughput. We also monitor interference from objects that can cause interference in the 2.4 Ghz and 5 Ghz ranges, such as unmanaged rogue APS, unshielded microwaves or inexpensive Bluetooth devices. Generally speaking, ENA's implementation, using Aerohive access points, can easily penetrate most classroom walls, including cinder block, drywall, or wood panelling. We have been successful penetrating multiple drywalls with a single access point, but in cinderblock construction, RF interence from the building material generally requires an access point to be placed in every other classroom, so that any one client is only transmitting through a single wall.

Please describe the average amount of time in hours per month the system will be down for regular scheduled maintenance. Also describe how maintenance will be accomplished so that the impact on system availability is minimized.

ENAAir service uses a highly available, cloud-based controller and management infrastructure that is installed in our core network POPs, which themselves have redundant power and multiple network interconnection paths. We expect no monthly downtime for regularly scheduled maintenance, as we are generally able to perform maintenance without any outage to our core infrastructure. Local outages may occur for no more than 10 minutes when we upgrade the firmware of the locally installed access points. We expect to upgrade firmware no more than 3 times a year, and will do so after hours and in coordination with local technology staff.

Please describe how backup systems will be utilized so that the impact on system availability is minimized.

ENA Air uses triple resiliency architecture to ensure optimal uptime and throughput. At our core, we use a geographically redundant management and monitoring infrastructure so that we can continue to manage and gather monitoring and reporting data from each ENA Air site even in the event of catastrophic failure to any one of our management nodes. Secondly, the Aerohive access points we will install as part of the ENA Air service create a local virtual controller that can continue to provide full local service, including all local SSIDs, wireless access policies and integration with local user authentication sources, even in the event that network connectivity to one or both of our core management nodes is lost. Third, ENA Air's implementation normally includes enough coverage overlap so that if one or multiple local access points fail, neighboring access points

will automatically note the failure of a neighbor and immediately invite the clients that had been connected to the failed access points to re-connect, so that no local loss of connectivity occurs.

Please describe other WLAN specifications

ENA Air service provides fully compliant 802.11 a/g/n wireless service on both the 2.4 Ghz and 5 Ghz ranges designed to work with any 802.11-compliant device. Please see below for our specific radio specifications:

- Radio Specifications—802.11a
  - 5.150–5.950 GHz Operating Frequency
  - Orthogonal Frequency Division Multiplexing (OFDM) Modulation
  - Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback
- Radio Specifications—802.11b
  - 2.4–2.5 GHz Operating Frequency
  - Direct-Sequence Spread-Spectrum(DSSS) Modulation
  - Rates (Mbps): 11, 5.5, 2, 1 w/ auto fallback
- Radio Specifications—802.11g
  - 2.4–2.5 GHz Operating Frequency
  - Orthogonal Frequency Division Multiplexing (OFDM) Modulation
  - 20 dBm (100 mW) Transmit Power
  - Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback
- Radio Specifications—802.11n
  - 2.4–2.5 GHz & 5.150–5.950 GHz Operating Frequency
  - 802.11n Modulation
  - Rates (Mbps): MCS0–MCS23 (6.5Mbps - 450Mbps)
  - 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
  - HT20 (both 2.4GHz and HT40 High-Throughput(HT) Support)
  - A-MPDU and A-MSDU Frame Aggregation

Section III—Cost Proposal

1. General Instructions

a. The Bidder must submit a cost proposal that covers the entire period of the contract, including any optional renewal periods.

Response:

HP has read and acknowledges.

b. The cost proposal shall include the costs necessary for the Bidder to fully comply with the contract terms and conditions and RFP requirements.

Response:

HP has read and acknowledges the cost proposal complies with the proposed contract terms and conditions and RFP requirements.

c. Failure to provide the requested information and to follow the required cost proposal format provided in Appendix B may result in the exclusion of the proposal from consideration, at the discretion of the Sourcing Team.

Response:

HP acknowledges and complies with the RFP required cost proposal format. Price Notes are provided to assist the evaluation team with understanding the Cost Proposal represented, and respective of the possible financial arrangements requested. We respectfully request an opportunity to discuss an updated presentation if the Price Notes are deemed cause for exclusion from consideration.

d. No costs related to the preparation of the proposal for this RFP or to the negotiation of the contract with the Sourcing Team may be included in the proposal. Only costs to be incurred after the contract effective date that are specifically related to the implementation or operation of contracted services may be included.

Response:

HP has read and acknowledges.

Appendix B

State of Maine Department of Education

in coordination with the

National Association of State Procurement Officials

COST PROPOSAL FORM

RFP # 201210412
MULTI-STATE LEARNING TECHNOLOGY INITIATIVE

Instructions: Bidders must complete the form below in order to have their proposals considered in this procurement process.

Bidder's Organization Name: Hewlett-Packard Company

Please Note:

- The participating states and entities involved with this procurement process recognize that costs can vary in accordance with the "commitment" and "readiness" of individual participating entities that are interested in implementing this learning technology program. With that in mind, Bidders are asked to submit tiered pricing, as indicated below. The structure that determines a participant's "tier" is shown on Appendix C.

- Costs for equipping students/teachers with learning technology and associated services must be proposed on a per-seat basis, as shown in Table 1, below.

- It is anticipated that total per-seat participation in this multi-state program will increase throughout the duration of the contracts that result from this RFP. Participating entities seek a discount of the pricing proposed by interested Bidders in Table 1 for every increase of 500,000 seats.

- Costs for setting up a wireless network within a participating school must also be provided on a per-seat basis, but these network costs must be provided separately, on Table 3, below. A state's aforementioned "tier" is irrelevant to its need for a wireless network to support this program, so only one cost figure is required, which would be applicable for all participating entities (on a per-seat basis).

- Table 4 has been provided for Bidders to list "optional features" that has been specified within the RFP (for example, optional "no fault" insurance coverage or Section 6.7).

COST PROPOSAL FORM

RFP # 201210412
MULTI-STATE LEARNING TECHNOLOGY INITIATIVE

Table 1 – Student/Teacher Learning Technology Solution Costs

Cost proposed per-seat for **Tier 1** participants:	$314.28 per-seat per-year * **
Cost proposed per-seat for **Tier 2** participants:	$345.15 per-seat per-year * **
Cost proposed per-seat for **Tier 3** participants:	$366.51 per-seat per-year * **

Table 2 – Volume Discount Factor

Percentage discount proposed to Table 1 prices for every 500,000 seats of increased participation:	0.0 % ***

Table 3 – School Wireless Network Costs

Cost proposed per-seat for all participants:	$30.91 per-seat per-year

Table 4 – Optional Features

HP ElitePad Educational Charging Carts	
QL490AA HP 30 Notebook Secure Managed Charging Cart	$1,970.00
QL488AA HP 20 Notebook Secure Charging Cart	$1,465.00
Extra ElitePad AC Adaptor	
H4K08AA HP ElitePad 10W A/C Adapter	$21.00
Extra External ElitePad Jacket Battery	
H4J85AA HP ElitePad Expansion Jacket	$36.00
H4F20AA HP ElitePad External Jacket Battery	$55.00
External Optical	

A2U57AA HP Mobile USB DVDRW	$42.00
Extended ElitePad Carepack Warranty Options	
UOW23E HP 1y PickupReturn/ADP Notebook Only SVC	$21.00
UOW25E HP 2y PickupReturn ADP Notebook Only SVC	$49.00
HR206E HP 3y PickupReturn/ADP Notebook Only SVC	$78.00
UOJ29E HP 4y Pickup and Return/ADP NB Only SVC	$137.00
ElitePad Docking Station	
C0M84AA ElitePad Docking Station	$75.00
ElitePad Administrator/Executive Options	
H4E45AA HP Executive Tablet Pen	$26.00
H4Q44AA HP Slim BT Keyboard	$27.00
H3T50AA HP X4000b Bluetooth Mouse	$18.00
H3N45AA HP ElitePad HDMI/VGA Adapter	$28.00
H3N46AA HP ElitePad USB Adapter	$12.00
H3N47AA HP ElitePad Smart Adapter	$20.00
H3N48AA HP Slate SD Card Reader	$18.00
H3N49AA HP Slate Ethernet Cable	$18.00
H3N50AA HP Slate Serial Cable	$18.00
ElitePad Cases	
A899996 InfoCase Fieldmate Always on Case for Tablets	$22.68
CVR600 Targus Groove Backpack	$19.00

TSB219US Targus Brilliance II Backpack	$19.00
CVR215 Sport Netbook Sleeve	$10.00
TSB007US Sport Backpack	$13.00
TSS126US A7 Netbook Sleeve	$10.00
Absolute Software for ElitePad	
A899173 Computrace Complete for 3 years	$50.49
A899174 Computrace Complete for 4 years	$62.41
A782324 Absolute Manage CT Modular Add-On 3yr SLED	$19.33
A782322 Absolute Manage CT Modular Add-On 4yr SLED	$24.77
Adobe Software for ElitePad	
A894883 Adobe Photoshop Elements	$32.94
A894884 Adobe Premier Elements	$32.94
A894531 Adobe Acrobat Professional	$65.86
A876982 Adobe Audition CS6	$77.55
Optional Computing Hardware	
A5K36AV HP Probook 4440s Celeron 320GB Bundle (includes carry sleeve)	$402.00
A5K36AV HP Probook 4440s i3 320GB	$464.00
A5K36AV HP Probook 4440s i5 500GB	$578.00
B7S86AV HP Elitebook Folio 9470m	$763.00
QV996AV HP Elite 8300 Small From Factor Desktop	$505.00
QV985AV HP Pro 6300 Small From Factor Desktop	$409.00

High Capacity Workstation	
A3J45AV Z220 Small From Factor Workstation	$735.00
HP Display Options	
XN376AA HP LA2206X LED LCD Monitor	$146.00
XW477A4 HP COMPAQ LA2205wg LCD Monitor	$272.00
HP Printing Options	
CC395A HP LaserJet M9050 MFP	$7,807.00
CD645A HP LaserJet Ent 500 MFP M575f Printer	$1,999.00
CM749A HP Officejet Pro 8600 e-AiO Printer N911a	$170.00
CM752A HP Officejet Pro 8100 Printer N811a	$126.00
Other Available ElitePad Options	
A805410 APC Essential SurgeArrest 6 Outlet 2 FT	$5.00
A856126 APC Essential SurgeArrest 6 Outlet 10 FT	$9.00
A888487 Belkin Anti Smudge Screen Protector 4PK	$39.00
A855810 20CT Cleaning Wipes 3X Clean Supplies	$4.00
A510609 ACM-70 Stereo Headphone 3.5MM Plug	$3.00
A845820 ViewSonic PJD6223 Networkable XGA Projector	$442.00
A842461 ViewSonic PLED-W500 Portable LED Projector	$547.00
HP Printing Supplies	
C8543X HP LaserJet 9040 Black Print Cartridge	$260.49
CE255A HP LaserJet P3015 6K Print Cartridge	$124.15

CE255X HP LaserJet P3015 12.5K Print Cartridge	$193.05
CN045AN HP 950XL Black Officejet Ink Cartridge	$32.36
CN046AN HP 951XL Cyan Officejet Ink Cartridge	$24.49
CN047AN HP 951XL Magenta Officejet Ink Cartridge	$24.49
CN048AN HP 951XL Yellow Officejet Ink Cartridge	$24.49
CN049AN HP 950 Black Officejet Ink Cartridge	$22.43
CN050AN HP 951 Cyan Officejet Ink Cartridge	$15.96
CN051AN HP 951 Magenta Officejet Ink Cartridge	$15.96
CN052AN HP 951 Yellow Officejet Ink Cartridge	$15.96
Professional Development Type	**Pricing**
State/District Level Professional Development*	
Subject Matter Expert Consulting	$3,600 per day
Educator, Leadership and Technology Professional Development*	
McREL Using Technology with Classroom Instruction that Works for Mentor Educators Face-to-Face Workshop (2+1 Days)	$14,000 per 2-day workshop $6,875 per 1-day workshop
McREL Balanced Leadership for Leaders Face-to-Face Workshop (2 Days)	$14,000/per 2-day workshop
McREL Managing Change for Leaders Follow-up Workshop Face-to-Face Workshop (2 Days)	$14,000/per 2-day workshop
Microsoft Innovative Educator (MIE) Program with Windows in the Classroom Face-to-Face Workshop	$5,750 per 2-day workshop $6,875 per 3-day workshop

(2+1 Days)	
Intel Transforming Learning with 1:1 Course: Learning with One to One Face-to-Face Workshop (3 Days)	$6,875 per 3-day workshop
Intel Transforming Learning with 1-1 Course: Student Engagement with One to One Face-to-Face Workshop (3 Days)	$6,875 per 3-day workshop
Intel Teach Elements Series Facilitated Online Training • **Project-Based Approaches**	$120 per educator/minimum of 10 and maximum of 30 educators per session
Intel Teach Elements Series Facilitated Online Training • **Assessment in 21st Century Classrooms**	$120 per educator/minimum of 10 and maximum of 30 educators per session
Intel Teach Elements Series Facilitated Online Training • **Collaboration in the Digital Classroom**	$120 per educator/minimum of 10 and maximum of 30 educators per session
Intel Teach Elements Series Facilitated Online Training • **Educational Leadership in the 21st Century**	$120 per educator/minimum of 10 and maximum of 30 educators per session
Intel Teach Elements Series Facilitated Online Training • **Thinking Critically with Data**	$120 per educator/minimum of 10 and maximum of 30 educators per session
Intel Workshop/Webinar Series (1 Day Workshop or 1 Hour Webinar) • **Preparing for Online Assessments and choosing the Right Device for Your Environment**	$3,125 per day $625 per webinar
Intel Workshop/Webinar Series (1 Day Workshop or 1 Hour Webinar) • **Moving from Print to Digital Text and Blended Learning**	$3,125 per day $625 per webinar

Intel Workshop/Webinar Series **(1 Day Workshop or 1 Hour Webinar)** • **BYOD: Bring Your Own Device Personalized Learning**	$3,125 per day $625 per webinar
Intel Workshop/Webinar Series **(1 Day Workshop or 1 Hour Webinar)** • **Using Technology to Support the Common core State Standards**	$3,125 per day $625 per webinar
Common Sense Media Onsite Seminar – From Digital Students to Digital Citizens (Half Day or Full Day Seminar)	$4,375 per half-day seminar $6,875 per full-day seminar
Common Sense Media Onsite Seminar – Be an Upstander! Addressing Cyberbullying in Schools (Half day or Full day Seminar)	$4,375 per half-day seminar $6,875 per full-day seminar
Common Sense Media Onsite Seminar – Keeping Track of Privacy and Digital Footprints (Half Day or Full Day Seminar)	$4,375 per half-day seminar $6,875 per full-day seminar
Common Sense Media Onsite Seminar – How to Respect Creative Work in Copy-past Culture (Half Day or Full Day Seminar)	$4,375 per half-day seminar $6,875 per full-day seminar
Common Sense Media Onsite Seminar – Getting Smart about E-Rate (Half Day or Full Day Seminar)	$4,375 per half-day seminar $6,875 per full-day seminar
ClassLink LaunchPad Basic for Teachers (Half Day Remote Class)	$575 per half day remote class
ClassLink Train-the-Trainer Turnkey Training for Your Leaders (Half Day Remote Class)	$1,250 per half day remote class
ClassLink Advanced Onsite Launching School Improvement Class Face-to-Face Workshop (1 Day)	$1,875 per 1-day workshop
Technical Training for HP Devices Face-to-Face Workshop (2 Days)	$5,750 per 2-day workshop
***Notes** **1.** Additional travel and expense charges may apply Face-to-face workshops are limited to approximately 25 participants per workshop	

Professional Development Type	Pricing
State/District Level Professional Development*	
Subject Matter Expert Consulting	$3,600 per day
Educator, Leadership and Technology Professional Development*	
McREL Using Technology with Classroom Instruction that Works for Mentor Educators Face-to-Face Workshop (2+1 Days)	$14,000 per 2-day workshop $6,875 per 1-day workshop
Managed Wi-Fi (ENA Air) Wireless Option:	
Optional Rogue Detection Service	$2,810.40

See Next Page for Notes related to Pricing Response.

* The lease pricing in this proposal is fixed through 5-31-13 (the "Initial Rate Expiration Date") and is calculated using a 2-year swaps indexed to .38% (the "Initial Yield"). After the Initial Rate Expiration Date, the lease pricing applicable to this proposal may be adjusted if the Yield as indicated in the Federal Reserve Board's Statistical Release, H.15 - Selected Interest Rates, on the lease commencement date. Full four (4) year Lease at listed Tier 1, 2 and 3 Lease Prices at the current calculated rate would be:

Full 4 Year Lease Price for **Tier 1** participants: $1,257.12 per-seat per-year
Full 4 Year Lease Price for **Tier 2** participants: $1,380.60 per-seat per-year
Full 4 Year Lease Price for **Tier 3** participants: $1,466.06 per-seat per-year

Due to limitations in structure of the **Table 1 – Student/Teacher Learning Technology Solution Costs, HP has not included Cash Transaction pricing however HP is willing to provide upon request.

*** At this time HP is not prepared to offer a volume discount price

Section IV—Economic Impact

In addition to all other information requested within this RFP, each Bidder must dedicate a section of its proposal to describing the Bidder's economic impact upon any state that chooses to participate under this program. The use of economic impact in making contract award decisions is required in accordance with State of Maine Executive Order 2012-004, which states that certain service contracts "…advertised for competitive bid shall include scoring criteria evaluating the responding Bidder's economic impact..." Although the Executive Order is specific to the State of Maine, the Bidder's economic impact information should be applicable to any state that chooses to participate in this program (whether it be Maine, or a different state).

For the purposes of this RFP, the term "economic impact" shall be defined as any activity that is directly performed by or related to the Bidder and has a direct and positive impact on the economy and public revenues within any state that chooses to participate under this program. Examples may include, but are not limited to, employment of the subject state's residents, subcontracting/partnering with the subject state's businesses, payment of state and local taxes (such as corporate, sales, or property taxes), and the payment of state licensing fees for the Bidder's business operations.

To complete the "economic impact" section of the Bidder's proposal, the Bidder shall include no more than one page of typed text, describing the Bidder's current, recent, or projected economic impact, as defined above. The Bidder may include all details and information that it finds to be most relevant for this section.

Response:

The Multi-State Learning Technology Initiative (MLTI), by virtue of introducing 21st century learning through advanced classroom technology, will help participating states' students to achieve higher academic standards and create a strong workforce for participating states. Thus, this initiative has tremendous ramifications for the future economy of participating states in the short and long term.

HP Corporate Economic Impact

As a significant employer around the world and in the United States specifically, HP is a major economic engine producing direct and indirect benefits to the economies where it operates. For instance, HP partners with approximately 1033 subcontractors or authorized service providers (resellers) throughout the 8 states intending to participate in the MLTI. The company also has a direct impact associated with the HP facilities, data centers and employees that are based throughout the participating region. Non-monetary impacts are also prevalent in the "HP Way", an employee culture fostered by Bill Hewlett and Dave Packard that has led to the extraordinary commitment of our employees to volunteerism and community activism. In 2012 HP employees volunteered 1.4 million hours across the globe, including 766,981 volunteer hours in the United States.

HP is keenly aware that public-private partnerships are critical to the creation of an equipped 21st century workforce that will meet industry's future needs and pay our government's future taxes. To assist in the development of future leaders HP is active in promoting STEM educational principles and fostering opportunities for budding entrepreneurs.

HP Catalyst and HP Learning Initiative for Entrepreneurs (HP LIFE) are two great examples of philanthropic programs that HP created to assist in the creation of a strong workforce. With the HP Catalyst Initiative, we are establishing a network of leading educators, education institutions, and key stakeholders in selected countries to explore innovative approaches to STEM education. HP LIFE is a global program for training students, aspiring entrepreneurs, and small business owners to harness the power of IT to establish and grow their business. Through programs such as these HP has invested over $12 million across the participating states since 2008.

Contract Execution

To roll out and maintain the managed infrastructure for each State, HP agrees to maintain an in-state team including a Project Manager and Professional Development Specialist(s). Education Specialist, deployment and maintenance resources will be required dependent on the tier level selected. Multiple onsite technical and professional development resources will work closely with the State and schools throughout the term of delivery. These are all potential permanent resources within a given state. Likewise, there will be temporary resources involved in deployment and maintenance that will be in-state requiring consumption services such as hotel, restaurants and fuel. Moreover the MLTI initiative will drive the need for local skilled and highly educated employment opportunities to fill these roles outlined above.

A support depot will be directly staffed on a regional rather than State basis to reduce cost. HP currently anticipates locating this repair depot within our existing Massachusetts facility to service Maine, Vermont and New Jersey. This is subject to change.

For Tier 1 and Tier 2 states, the train-the-trainer model mentioned in section 10 of this document will provide an incentive to participation as well as an economic impact to the community. Stipends provided for teacher participation and substitute teaching resources will ensure participation as well as economic support to the community. As previously mentioned a model a state purchasing 70,000 may have 240 trainers who would receive a stipend when they conducted local training.

As indicated above, HP is committed to the creation of a competent and well-equipped workforce. To that end, HP will collaborate with local universities, community colleges, and/or trade schools to provide internship and job-shadowing opportunities with the in-state trainers, project managers, and professional development specialists. Similarly, HP would be open to creating an optional self-maintenance model for interested schools that would provide additional opportunities for students and/or faculty to learn from our specialists and eventually maintain operations internally.

Part VI – Contract Administration and Conditions

Contract Document

1. The successful Bidder(s) will be required to execute a contract in the form of a NASPO Master Price Agreement. A copy of the standard terms and conditions that make up a Master Price Agreement are provided as Appendix D.

   As noted above, after a successful Bidder is pre-qualified and signs a Master Price Agreement, then it will be eligible to sign Participating Addenda with interested states. The terms and conditions that make up a Participating Addendum will be made up of that state's standard contract language, but will vary from state to state.

Response:

HP has read and acknowledges. We have included for the purposes of this proposal our position on various contracting issues based on our current understanding of the scope of the RFP. We have included clarifications or modifications to the requirements that form the basis of our proposed solution, and submitted for consideration by the State in the resulting contract between us. In general, while a specific exception may be set forth, HP remains receptive to further good faith negotiations with the State regarding these elements. HP looks forward to discussing these terms with the State and thanks the State for this opportunity.

2. The Sourcing Team estimates having Master Price Agreements in place in January 2013. The Sourcing Team recognizes, however, that the actual contract effective date depends upon completion of the RFP process, date of formal award notification, length of contract negotiation, and preparation and approval by internal state approval bodies. Any appeals to the award decision(s) may further postpone the actual contract effective date, depending upon the outcome. The contract effective date may need to be adjusted, if necessary, to comply with mandated requirements.

Response:

HP has read and acknowledges.

4. In providing services and performing under the contract, the successful Bidder shall act independently and not as an agent of the Sourcing Team or the participating state(s).

Response:

HP has read and acknowledges.

Standard Agreement Provisions

1. Payments and Other Provisions

   The payment terms under this program will be determined upon the formation of the Participating Addenda with individual, participating states. An invoice will be considered accurate and acceptable if it contains all of the requirements specified by the participating state, which may include but is not limited to: a reference to the state's contract number, contains correct pricing information relative to the contract, receipt of satisfactory deliverables, and provides any required supporting documents, as applicable, and any other specific requirements listed within this RFP.

Response:

HP has read and acknowledges that payment terms under Participating Addenda may require adjustment by the participating entity to align with State purchase regulations, and agrees to negotiate these elements in good faith based on the proposed payment terms and scope included in this proposal.

Appendix D – NASPO Standard Terms and Conditions

NASPO Standard Terms and Conditions

HP has read and acknowledges Appendix D. We have included modifications within our proposal response reflecting our position on various contract elements based on our current understanding of the scope of the RFP. These include clarifications or modifications to the requirements; and, Additional Provisions relevant to the sale, support and use of technology constituting a purchase contract with financing options. These form the basis of our proposed solution, and are submitted for consideration by the State in the resulting contract between us. In general, while a specific exception may be set forth, HP remains receptive to further good faith negotiations with the State regarding these elements. HP looks forward to discussing these terms with the State and thanks the State for this opportunity.

FINANCING TERMS AND CONDITIONS:

For financing, Hewlett-Packard Company ("HP") is responding as the Lessor with the express intent to assign Purchasing Entity Lease Agreements and Lease Schedules to Hewlett-Packard Financial Services ("HPFS"). The terms and conditions of these finance options are represented in the enclosed Master Lease Agreements below. Any service level agreements and requirements will be the responsibility of HP, the supplier of the equipment. The precedent and separate terms and conditions applicable to financing are described and reflected exclusively in the State and Local Government Master Lease Purchase Agreement, or the State and Local Government Master Operating Lease included in HP Appendix B and HP Appendix C ("Master Lease Agreements"). Master Lease Purchase Agreements are expressly conditioned on the transaction qualifying for tax-free municipal lease treatment under the Internal Revenue Code.

Participants: The National Association of State Procurement Officials ("NASPO") is a national association of Chief Procurement Officers that has established a procurement cooperative for state government departments, institutions and political subdivisions (i.e., colleges, school districts, counties, cities, etc.) for the NASPO Member States and territories of the United States.

The Western States Contracting Alliance (WSCA) is fifteen members of NASPO who have focused on creating and managing multi-state cooperative contracts since 1993.

Obligations under contracts that result from this cooperative procurement are limited to those states and other eligible purchasing entities that execute a Participating Addendum.

Financial obligations of Participating States are limited to the orders placed by the departments or other state agencies and institutions having available funds.

Participating States incur no financial obligations on behalf of political subdivisions. Unless otherwise specified in the solicitation, the resulting master price agreement(s) will be permissive.

Definitions:

"Lead State" means the State conducting this cooperative solicitation and centrally administering any resulting master price agreement.

"Master Price Agreement" means this cooperative solicitation and contract, between the designated Lead State and the awarded contractors.

"Offer" or **"Bid"** or **"Proposal"** refers to the offer submitted in response to a solicitation, whether denominated as an invitation to bid, invitation for bid, request for proposal, or otherwise. **"Bidder"** or **"Offeror"** similarly refers to the person, company, or other entity submitting the bid or proposal that constitutes an offer capable of acceptance, regardless of the solicitation method used.

"Permissive Price Agreement" means that placement of orders through the price agreement is discretionary with Purchasing Entities. They may satisfy their requirements through the master price agreement without using statutory or regulatory procedures (e.g. invitations for bids) to solicit competitive bids or proposals. Purchasing Entities may, however, satisfy requirements without using the master price agreement so long as applicable procurement statutes and rules are followed.

"Participating Addendum" means a bilateral agreement executed by a contractor and a Participating State (or a governmental entity/political subdivision with the consent of its state's chief procurement officer) that clarifies the operation of the master price agreement for the State concerned, e.g. ordering procedures specific to a State, and may add other state-specific language or other requirements. A Participating Addendum may not alter the scope of the Master Agreement or any other Participating Addendum. Unless otherwise specified, the Participating Addendum shall renew concurrently with the Master Agreement.

Response:

HP respectfully requests the above modification to further clarify the operation of Participating Addendums respective of the Master Agreement; and, to allow the sustainability and equity of the proposed pricing set forth that is reflective of the proposed scope of work available to the Participating Entities.

"Participating State (Entity)" means a state (or entity (not a state), with the prior approval of its state chief procurement official) that has executed a Participating Addendum as required by this Master Price Agreement.

"Purchasing Entity" means a Participating State, or other legal entity, properly authorized by a Participating State to enter into a contract for the purchase of goods and/or services described in the cooperative procurement. Unless otherwise limited in the cooperative procurement or in a Participating Addendum, political subdivisions of Participating States are deemed Purchasing Entities.

Reporting and Admin Fees

A. Reporting and Administrative Fees

1. The Contractor agrees to provide quarterly utilization reports to NASPO or WSCA and the Lead State Contract Administrator by the 15th of the month following the end of the previous quarter. (Ex. Purchases during January are reported by the 15th of April). The report shall be in the format developed by the Lead State and supplied to the Contractor prior to or upon execution of the Contract.

Response:

HP acknowledges and agrees to comply. We agree to work with the Lead State to develop a mutually agreed upon report format that accommodates commercially reasonable reporting elements.

2. The Contractor agrees to provide quarterly Administrative Fee check payable to NASPO for an amount equal to one-half of one percent (0.005) of the net sales for the period. The form to be submitted with the check, as well as the mailing address, will be supplied to the Contractor after the execution of the Contract. Payment shall be made in accordance with the following schedule:

Period End	**Payment and Report Due**
June 30	July 31
September 30	October 31
December 31	January 31
March 31	April 30

3. The Contractor agrees to include data from all Reseller/Distributor/VAR/Agent sales in the monthly utilization reports described above.
4. The utilization reports shall be submitted to the Lead State Contract Administrator via electronic mail in a Microsoft Excel spreadsheet format, or other methods such as direct access to Internet or other databases.

Response:

HP has read and acknowledges with clarification that "other methods" of reports are subject to the prior mutual agreement of HP and the Lead State.

5. If requested by the Lead State Contract Administrator, the Contractor agrees to provide supporting Purchase Order detail records on mutually agreed media in a mutually agreed format.

Response:

HP has read and acknowledges.

6. The failure to file the utilization reports and fees on a timely basis shall constitute grounds for the removal of the Contractor's primary representative, suspension of this Agreement or termination of this Agreement for cause.
7. The NASPO, WSCA and the Lead State Contract Administrator shall be allowed access to all reports from all Purchasing Entities.

Response:

HP has read and acknowledges.

B. Participating Entity Reports and Fees

1. Participating Entities may require an additional fee be paid directly to the State on purchases made by Purchasing Entities within that State. For all such requests, the fee

level, payment method and schedule for such reports and payments shall be incorporated in to the Participating Addendum that is made a part of this Agreement. The Contractor may adjust pricing accordingly for purchases made by Purchasing Entities within the jurisdiction of that State. All such agreements shall have no affect whatsoever on the NASPO administrative fee or the prices paid by the Purchasing Entities outside the jurisdiction of the State requesting the additional fee.

Response:

HP has read and acknowledges.

2. Purchasing Entities will be encouraged to use the reporting format developed by the Lead State for their reporting needs. However, the Contractor agrees to provide additional reports to Purchasing Entities upon agreement by both parties as to the content and delivery methods of the report. Methods of delivery may include direct access to Internet or other databases.

Response:

HP has read and acknowledges and will agree to provide content and delivery methods as mutually agreed by the Participating State and/or purchasing entities.

3. Each State Purchasing Entity shall be allowed access to reports from all entities within that State.

Response:

HP has read and acknowledges and will provide reporting as requested. Upon request to provide access to report for all entities within a State to the designated State contact listed in the Participating Addendum (PA) or as designated by the State contact listed in the PA.

Quantity Estimates: Estimated quantities are informational and not to be construed as a warranty of accuracy of historical or anticipated volumes or a guarantee to purchase any amount.

Specifications: Any deviation from specifications must be clearly indicated by offeror, otherwise, it will be considered that the proposal is in strict compliance. When BRAND NAMES or manufacturers' numbers are stated in the specifications they are intended to establish a standard only and are not restrictive unless the solicitation says "no substitute." Offers will be considered on other makes, models or brands having comparable quality, style, workmanship and performance characteristics. Alternate proposals offering lower quality or inferior performance will not be considered.

Acceptance or Rejection of Bids and Proposals: The Lead State reserves the right to accept or reject any or all bids or proposals, or parts of bids or proposals, and to waive informalities therein.

Samples: Generally, when required, samples will be specifically requested in the solicitation. Samples, when required, are to be furnished free of charge. Except for those samples destroyed or mutilated during testing, samples will be returned at an offeror's request, transportation collect.

Cash Discount Terms: Offeror may quote a cash discount based upon early payment; however discounts offered for less than 30 days will not be considered in making the award. The date

from which discount time is calculated shall be the date a correct invoice is received or receipt of shipment, whichever is later; except that if testing is performed, the date shall be the date of acceptance of the merchandise.

Response:

HP respectfully advises that Cash Discount Terms do not apply.

Taxes: Offered prices shall be exclusive of state sales and federal excise taxes. Where the state government entities are not exempt from sales taxes on sales within their state, the contractor shall add the sales taxes on the billing invoice as a separate entry.

Response:

HP has read and acknowledges. HP will have no responsibility for sales or use taxes resulting from any transaction contemplated under this Agreement, and will invoice these to the purchasing entity.

Modification or Withdrawal of Bids and Proposals: Bids and proposals may be modified or withdrawn prior to the time set for receipt of bids or proposals. After the time set for receipt of bids or proposals, no proposal may be modified or withdrawn.

Patents, Copyrights, Etc: The Contractor shall release, defend, indemnify, and hold harmless NASPO, the Participating States, and the Purchasing Entities, as well as the officers, agents and employees of NASPO, the Participating States and the Purchasing Entities, from liability of any kind or nature, including the Contractor's use of any copyrighted or uncopyrighted composition, process, patented or unpatented invention, article or appliance furnished or used in performance of this contract.

Response:

HP conditions its indemnification within the limits of the Intellectual Property Rights Infringement provision specified in the Additional Provisions, below.

Award: Multiple master price agreements may be awarded as a result of this solicitation. Awards in requests for proposals (competitive sealed proposals) shall be made to the responsible offeror(s) whose proposals are determined to the most advantageous to the Participating States, taking into consideration price and the other evaluation factors set forth in the solicitation. Unless otherwise stated in the solicitation, an award in a solicitation denominated as an invitation to bid will be made to the lowest responsive and responsible Bidder(s) meeting specifications and all bid terms and conditions. The Participating States reserve the right to award items separately or by grouping items, or by total lot.

Non-Collusion: By signing the proposal the offeror certifies that the proposal submitted, has been arrived at independently and has been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other vendor of materials, supplies, equipment or services described in the solicitation, designed to limit independent bidding or competition.

Termination: Unless otherwise stated in the ~~solicitation~~Master Agreement, any master price agreement entered into as a result of this solicitation may be terminated by either party upon 60-days notice, in writing, prior to the effective date of the termination. Further, any Participating State may terminate its participation upon 30-days written notice, unless otherwise limited or

stated in the ~~special~~ terms and conditions of the Participating Addendum~~solicitation~~. Any termination under this provision shall not effect the rights and obligations attending orders outstanding at the time of cancellation, including any right of any Purchasing Entity to indemnification by the Contractor, rights of payment for goods/services delivered and accepted, and rights attending any warranty or default in performance in association with any order.

Response:

HP respectfully requests the above modifications to allow the mutually negotiated termination language that is in the resultant Master Agreement and Participating Addendum to withstand.

HP clarifies that the parties will enter into a 4 year agreement for the required equipment and services. The Purchasing Entity may terminate the four year agreement earlier (for nonperformance by the Contractor and) in accordance with the terms set forth in the agreement and with all applicable governing law, provided, however, that nothing in this Agreement shall permit the Purchasing Entity to terminate the lease other than in accordance with the terms of the applicable Master Lease Agreement and effective Lease Schedule.

A. Any of the following shall constitute cause to declare the master price agreement or any order under this master price agreement in default:

   Default and Remedies:

   (1) Nonperformance of contractual requirements; or

   (2) A material breach of any term or condition of this master price agreement.

B. A written notice of default, and an opportunity to cure, shall be issued by the party claiming default, whether the Lead State (in the case of breach of the master price agreement), a Participating State (in the case of a breach of the Participating Addendum), the Purchasing Entity (with respect to any order), or the Contractor. Time allowed for cure shall not diminish or eliminate any liability for liquidated or other damages.

C. If the default remains after the opportunity for cure, the non-defaulting party may:

   (1) Exercise any remedy provided by law or equity;

   (2) Terminate the master price agreement or any portion thereof, including any orders issued against the master price agreement;

   ~~(3) Impose liquidated damages, as specified in the solicitation or master price agreement;~~

   (4) In the case of default by the contractor, and to the extent permitted by the law of the Participating State or Purchasing Entity, suspend contractor from receiving future solicitations.

Response:

HP respectfully takes exception to including a reference to C.(3) liquidated damages, on a general basis, in the Master Agreement. HP shall make commercially reasonable efforts to remedy on a timely basis any failure for which the State provides written notification.

Notwithstanding anything to the contrary in this response or resulting Master Agreement, any lease under this agreement may be terminated only in accordance with the terms of the instrument governing that lease provided, however, that nothing in this Agreement shall

permit the State to terminate the lease of any Product under this Agreement other than in accordance with the terms of the applicable Master Lease Agreement and effective Lease Schedule.

Laws and Regulations: Any and all supplies, services and equipment offered and furnished shall comply fully with all applicable Federal and State laws and regulations.

Conflict of Terms: In the event of any conflict between these standard terms and conditions and any special terms and conditions in the solicitation, the special terms and conditions shall govern.

Reports: The contractor shall submit quarterly reports to the Lead State contract administrator, and upon request to any Participating State, showing the quantities and dollar volume of purchases by each Purchasing Entity.

Hold Harmless: The contractor shall release, defend or settle, indemnify and hold harmless NASPO, the Participating States, and the Purchasing Entities, as well as the officers, agents and employees of NASPO, the Participating States and the Purchasing Entities, from and against any third party ~~damage, cost or~~ liability, including reasonable attorneys fees for any or all injuries to persons, property or claims for money damages arising from the negligent acts or omissions of the contractor, its employees or subcontractors or volunteers related to the performance of Contractor's obligations under this Master Agreement.

Response:

HP respectfully requests the above modifications, and clarifies that its obligation is predicated by NASPO, the Participating States, or the Purchasing Entity (as applicable to the claim), providing prompt written notice of the claim to the Contractor; cooperates with Contractor; and allows Contractor to control the defense and related settlement negotiations.

Order Numbers: Master price agreement numbers and purchase order numbers shall be clearly shown on all acknowledgments, shipping labels, packing slips, invoices, and on all correspondence.

Governing Law and Venue: This procurement shall be governed and the resulting master price agreement construed in accordance with the laws of the Lead State. The construction and effect of any Participating Addendum or order against the master price agreement shall be governed by and construed in accordance with the laws of the Purchasing Entity's State. Venue for any claim, dispute or action concerning the construction and effect of the master price agreement shall be in the Lead State. Venue for any claim, dispute or action concerning an order placed against the master price agreement or the effect of a Participating Addendum shall be in the Purchasing Entity's State.

Delivery: The prices offered shall be the delivered price to any NASPO state agency or purchasing entity, excluding applicable taxes payable by the purchasing entity. All deliveries shall be F.O.B. destination with all transportation and handling charges paid by the contractor. Responsibility and liability for loss or damage shall ~~remain the Contractor until final inspection and acceptance when responsibility shall~~ pass to the Purchasing Entity upon delivery to the "Ship to" location identified on the Order, except as to latent defects, fraud and Contractor's warranty obligations. ~~The minimum shipment amount will be found in the special terms and conditions. Any order for less than the specified amount is to be shipped with the freight prepaid and added~~

~~as a separate item on the invoice. Any portion of an order to be shipped without transportation charges that is back ordered shall be shipped without charge.~~

Response:

HP respectfully requests the above modifications to reflect that risk of loss passes upon delivery to the ship to location, when the product is within the control of the purchasing entity.

Warranty: ~~The contractor acknowledges that the Uniform Commercial Code applies to this master price agreement. In general, the contractor warrants that: (a) the product will do what the salesperson said it would do, (b) the product will live up to all specific claims that the manufacturer makes in their advertisements, (c) the product will be suitable for the ordinary purposes for which such product is used, (d) the product will be suitable for any special purposes that the Purchasing Entity has relied on the contractor's skill or judgment to consider when it advised the Purchasing Entity about the product, (e) the product has been properly designed and manufactured, and (f) the product is free of significant defects or unusual problems about which the Purchasing Entity has not been warned.~~

~~The contractor agrees to warrant and assume responsibility for each hardware, firmware, and/or software product (hereafter called the product) that it licenses, or sells, to the Purchasing Entity under this master price agreement. When applicable, Contractor warrants that product(s) furnished pursuant to this contract shall, when used in accordance with the product documentation, be able to accurately process date/time data (including, but not limited to, calculating, comparing, and sequencing) transitions, including leap year calculations. Where a contractor proposes or an acquisition requires that specific products must perform as a package or system, this warranty shall apply to the products as a system.~~

~~Where contractor is providing ongoing services, including but not limited to: i) consulting, integration, code or data conversion, ii) maintenance or support services, iii) data entry or processing, or iv) contract administration services (e.g., billing, invoicing, claim processing), contractor warrants that services shall be provided in an accurate and timely manner without interruption, failure or error due to the inaccuracy of contractor's business operations in processing date/time data (including, but not limited to, calculating, comparing, and sequencing) various date/time transitions, including leap year calculations. Contractor shall be responsible for damages resulting from any delays, errors or untimely performance resulting therefrom, including but not limited to the failure or untimely performance of such services.~~

~~This Date/Time Warranty shall survive beyond termination or expiration of this contract through: a) ninety (90) days or b) the contractor's or product manufacturer/developer's stated date/time warranty term, whichever is longer. Nothing in this warranty statement shall be construed to limit any rights or remedies otherwise available under this contract for breach of warranty.~~

Response:

HP respectfully replaces the above Warranty section with HP's standard warranty in the Additional Provisions, below, representative and reflective of the scope and competitive prices offered by HP in this proposal.

Amendments: The terms of this master price agreement shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of the Master Price Agreement Administrator of the Lead State and Contractor.

Response:

HP respectfully requests the above modification to clarify that such changes are subject to the mutual agreement of the parties.

Assignment/Subcontract: Contractor shall not assign, sell, transfer, subcontract or sublet rights, or delegate responsibilities under this master price agreement, in whole or in part, without the prior written approval of the Master Price Agreement Administrator of the Lead State which will not be unreasonably withheld. Notwithstanding, HP reserves the right to assign financial Leases to HP Financial Services or financers, without obtaining prior written approval.

Response:

HP respectfully requests the above addition. It is assumed that the subcontractors identified in our proposal are approved, when awarded. For financing options, HP reserves the right to assign financial lease elements to financiers, without obtaining prior written approval.

Nondiscrimination: The offeror agrees to abide by the provisions of Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973, or the Americans with Disabilities Act of 1990 which prohibits discrimination on the basis of disabilities. The offeror further agrees to furnish information and reports to Participating State(s), upon request, for the purpose of determining compliance with these statutes. Offeror agrees to comply with each individual state's certification requirements, if any, as stated in the special terms and conditions. This master price agreement may be canceled if the offeror fails to comply with the provisions of these laws and regulations. The offeror must include this provision in every subcontract relating to purchases by the States to insure that subcontractors and vendors are bound by this provision.

Severability: If any provision of this master price agreement is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected; and the rights and obligations of the parties shall be construed and enforced as if the master price agreement did not contain the particular provision held to be invalid.

Inspections: Goods furnished under this master price agreement shall be subject to inspection and testing by the Purchasing Entity at times and places determined by the Purchasing Entity. If the Purchasing Entity finds goods furnished to be incomplete or not in compliance with proposal specifications, the Purchasing Entity may reject the goods and require Contractor to either correct them without charge, or deliver them at a reduced price, which is equitable under the circumstances and subject to the mutual agreement of the parties. If Contractor is unable or refuses to correct such goods within a commercially reasonable time ~~deemed reasonable by the Purchasing Entity~~, the Purchasing Entity may cancel the order in whole or in part subject to the mutual agreement of the parties and termination provisions of this Agreement. Nothing in this paragraph shall adversely affect the Purchasing Entity's rights including the rights and remedies under the Uniform Commercial Code.

Response:

HP respectfully requests the above modifications to allow for discussion amongst the parties in such instance; to afford an opportunity for cure; and, allow the warranty and termination provisions in this Agreement to stand. The proposed Products are provided with the manufacturer's published specifications.

Payment: ~~Payment for completion of a master price agreement order is normally made within 30 days following the date the entire order is delivered or the date a correct invoice is received, whichever is later.~~ The Contractor may assess overdue account charges on the outstanding balance in accordance with, and up to the maximum allowed by, the laws of the participating state. Payments may be remitted by mail or electronic funds transfer.

Response:

HP has read and clarifies the requested modification above, and addition: Payments. Except for payments due under a lease or lease schedule, payment is due to Contractor net 30 days from invoice date for each Order placed under a Participating Addendum. Notwithstanding, lease payments are strictly governed by the terms and conditions of the applicable lease agreement and lease schedule. Payment terms for a lease transaction are set forth in the Lease Schedule of the Master Lease Agreement. Participating Agreements or Orders entered into by HP pursuant to this Master Agreement may be subject to satisfactory credit checks of the purchasing entity by HP. HP may suspend or cancel performance of open Orders or services if Customer fails to make payments when due.

Force Majeure: Neither party to this master price agreement shall be held responsible for delay or default caused by fire, riot, acts of God and/or war which is beyond that party's reasonable control, except for payment obligations. The Lead State may terminate this master price agreement after determining such delay or default will reasonably prevent successful performance of the master price agreement.

Response:

HP respectfully requests the above modification respective of the lease elements proposed.

Hazardous Chemical Information: The Contractor will provide one set of the appropriate material safety data sheet(s) and container label(s) upon delivery of a hazardous material to the Purchasing Entity agency. ~~All safety data sheets and labels will be in accordance with each participating state's requirements.~~

Response:

HP respectfully requests the above modification on the basis material safety data sheets are provided in accordance with applicable federal requirements.

Firm Price: Unless otherwise stated in the special terms and conditions, for the purpose of award, offers made in accordance with this solicitation must be good and firm for a period of ninety (90) days from the date of receipt of bids or proposals. Prices must remain firm for the full term of the master price agreement.

Response:

HP has read and acknowledges.

Extension of Prices: In the case of error in the extension of prices in the proposal, the unit prices will govern.

Proposal Preparation Costs: NASPO and the lead state are not liable for any costs incurred by the offeror in preparation of the bid or proposal.

Certification Regarding Conflict of Interest: Contractor certifies that it has not offered or given any gift or compensation prohibited by the state laws of any Participating State to any officer or employee of NASPO or Participating States to secure favorable treatment with respect to being awarded this contract.

Independent Contractor: Contractor shall be an independent contractor, and as such shall have no authorization, express or implied to bind the Participating States to any agreements, settlements, liability or understanding whatsoever, and agrees not to perform any acts as agent for NASPO or the states, except as expressly set forth herein.

Political Subdivision Participation: Participation under this master price agreement by political subdivisions (i.e., statutorily eligible colleges, school districts, counties, cites, etc.,) of a NASPO state, with the prior approval of the state chief procurement official, shall be voluntarily determined by the political subdivision.

The contractor agrees to supply the political subdivisions based upon the same terms, conditions and prices.

Certification Regarding Debarment: The Contractor certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. If the Contractor cannot certify this statement, attach a written explanation for review by NASPO.

Records Administration: The Contractor will maintain, or supervise the maintenance of all records necessary to properly account for the payments made to the Contractor for costs authorized by this master price agreement. These records will be retained by the Contractor for at least four years after the master price agreement terminates, or until all audits initiated within the four years have been completed, whichever is later.

Audit of Records: The Contractor agrees to allow NASPO, State and Federal auditors, and state agency staff access to all the records related to this master price agreement, and the right to copy those records, for audit, inspection and monitoring of services. Such access will be during normal business hours, or by appointment.

Response:

HP has read and acknowledges with the following clarification:

During the term, Customer may appoint a nationally recognized third-party auditor to conduct, at its cost, audits of orders from Customer to HP for products and services, including invoices and Customer payment records associated with such orders. Such audits may be conducted only in accordance with the following:

Audits will occur no more than once each calendar year and the scope of the audit will be limited to Customer orders to HP over the preceding twelve (12) month period;

Customer will provide HP with thirty (30) days prior written notice of each audit;

The parties will work together in good faith to establish an audit process that does not interfere with HP's ability to perform its obligations under this Agreement or any other agreement, or compromise any reasonable security processes or procedures;

Prior to conducting the audit, the auditor will sign a confidentiality agreement that is no less protective to HP than the confidentiality terms set forth in this Agreement;

HP will provide the auditor with information reasonably required to effect the audit, provided however that HP reserves the right to impose limitations or require additional assurances from Customer and its auditor as may be necessary to protect the Confidential Information of HP that may be accessed by Customer's auditor as a part of the audit;

The auditor reports prepared in connection with the audits will be deemed confidential information of HP; and

In no event will HP be required to provide Customer or its auditor with access to HP's internal cost and resource utilization data, or data related to employees or other customer of HP.

Prices as Ceiling:

Master Price Agreement prices represent ceiling prices for the supplies and services priced in the master price agreement.

~~The vendor shall report to the Lead State any price reduction or discount, or other more favorable terms, offered to any Purchasing Entity.~~

~~In instances NOT related to the established standards, committed volumes or volume bulk purchases of a participating state or states, the awarded vendor agrees to negotiate in good faith to reestablish ceiling prices or other more favorable terms and conditions applicable to future orders.~~

Response:

HP respectfully requests the above deletion. HP will honor the ceiling prices, and as may otherwise be mutually agreed between the parties in the respective Order statement of work. We do not have mechanisms in place to accurately document and report what constitutes "more favorable terms" and associated "pricing", and make no commitment or representation herein to that effect.

State Participation/Unique Terms and Conditions:

Apart from the Lead State conducting the solicitation, the States included in

Appendix E, State Profiles, have signified their initial intent to participate in a Master Price Agreement resulting from this Solicitation. ~~Attachment A of the Solicitation includes any significant modifications to these terms and conditions or State-specific provisions required by the laws, regulations, or procurement practices of the State(s).~~ Final participation in the Master Price Agreement by the State(s) shall be signified through the execution of a Participating Addendum.

After the solicitation has closed and an award has been made, additional NASPO members may be added with the consent of the contractor through execution of a Participating Addendum.

Response:

Amendment 2 to the RFP made the above deletion, removing Attachment A.

HP will enter into Participating Addendums with eligible Participating Entities, and agrees to good faith negotiations of changes in the Participating Addendum to the provisions of the Master Agreement for the limited purpose of clarifying the operation of the master price agreement for the State concerned, e.g. ordering procedures specific to a State, or other applicable state purchase requirements. A Participating Addendum may not alter the scope of the Master Agreement or any other Participating Addendum. Unless otherwise specified, the Participating Addendum shall renew concurrently with the Master Agreement.

HP looks forward to discussing these terms with the respective Participants and thanks the State for this opportunity.

Rental and Leases:

Rental:

Individual Participating States and Participating Entities may enter in to rental agreements for the products covered in the contracts resulting from the RFP, if they have the legal authority to enter into these types of agreements without going through a competitive process. Responders who wish to participate in rental agreements with these individual states/entities must subject copies of all of their rental agreements with their responses to this RFP. The rental agreements will not be reviewed or evaluated as part of the RFP evaluation process defined in this RFP. The agreements will simply be made available to any state or entity who wishes to negotiate a rental agreement with a Contractor.

Leases:

Individual Participating States and Participating Entities may enter in to lease agreements for the products covered in the contracts resulting from the RFP, if they have the legal authority to enter into these types of agreements without going through a competitive process. Responders who wish to participate in lease agreements with these individual states/entities must submit copies of all of their lease agreements with their response to this RFP. The lease agreements will not be reviewed or evaluated as part of the RFP evaluation process defined in this RFP. The agreements will simply be made available to any state or entity who wishes to negotiate a lease agreement with a Contractor.

Response – Rentals and Leases:

FINANCING TERMS AND CONDITIONS:

For financing, Hewlett-Packard Company ("HP") is responding as the Lessor with the express intent to assign Purchasing Entity Lease Agreements and Lease Schedules to Hewlett-Packard Financial Services ("HPFS"). The terms and conditions of these finance options are represented in the enclosed Master Lease Agreements below. Any service level agreements and requirements will be the responsibility of HP, the supplier of the equipment. The precedent

and separate terms and conditions applicable to financing are described and reflected exclusively in the State and Local Government Master Lease Purchase Agreement, or the State and Local Government Master Operating Lease included in HP Appendix B and HP Appendix C ("Master Lease Agreements"). Master Lease Purchase Agreements are expressly conditioned on the transaction qualifying for tax-free municipal lease treatment under the Internal Revenue Code.

~~**Comprehensive Financial Options that should be Included**:~~

- ~~Purchase~~
- ~~Operational Leases – with varying buyout ownership options at end of term including no ownership option~~
- ~~Capital Leases – Traditional financing with ownership at end of term (software, buyouts of existing leases)~~
- ~~Cancelable Rentals – Cancel with four month penalty on rental payment~~

- ~~All leases and rentals must have a non appropriations clause~~

Response:

Not Applicable. The above section, titled "Comprehensive Financial Options" has been removed by the State of Maine in Amendment 2 of RFP 201210412.

HP has included the representative Lease Agreement (2 options) that apply to the Purchasing Entity to finance its acquisition over a 4 year term. HP requests the ability to discuss with the State the Lease Agreements that are available to assure it is appropriately reflected in the resulting Master Agreement, and to address terms and conditions for the flexibility of out-right purchases versus financed purchases that may be entertained by a Purchasing Entity. The terms and conditions of the Lease Agreement and Lease Schedule (as applicable) shall take precedence over the terms and conditions of the Master Agreement and Participating Addendum.

Non-Appropriation: The terms of the Agreement and any purchase order issued for multiple years under this Agreement is contingent upon sufficient appropriations being made by the Legislature or other appropriate governing entity~~. Notwithstanding any language to the contrary in this Agreement or in any purchase order or other document, a~~ A Purchasing Entity may terminate its obligations under this Agreement, if sufficient fiscal appropriations are not made by the governing entity at a level sufficient to allow for payment of the goods or services due for the fiscal period under multiple year agreements~~, or if operations of the paying entity are being discontinued~~. ~~The Purchasing Entity's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final and binding.~~ At Contractor's request, the Purchasing Entity shall promptly provide supplemental documentation evidencing such non-appropriation. Nothing in this Section shall be construed as ability by the Purchasing Entity to terminate an Order for its convenience.

A Purchasing Entity shall provide sixty (60) days notice, if possible, of its intent to terminate for reason cited above. Excluding Purchasing Entity obligations that may be otherwise specified in the applicable Lease Agreement or Lease Schedule (as applicable), s~~S~~uch termination shall

relieve the Purchasing Entity, its officers and employees from any responsibility or liability for the payment of any further amounts under the relevant Purchase Order/

Response:

HP respectfully requests the above modifications. The terms and conditions of the Lease Agreement and Lease Schedule (as applicable) shall take precedence over the terms and conditions of the Master Agreement and Participating Addendum.

WSCA/NASPO eMarket Center: Awarded responders are required to participate in the WSCA/NASPO eMarket Center and, working through WSCA's contractor (SciQuest), connect with the eMarket Center. The ideal situation would be to use either a hosted (by SciQuest) or Punchout Level 2 catalog configurations, but actual requirements will be determined by the Lead State Contract Administrator, WSCA, WSCA's contractor (SciQuest) and the awarded contractor, after award. Participation does not require an awarded responder to have any special level of technology or technological understanding.

Response:

HP understands and currently has an eMarket Center under the WSCA/NASPO eMarket Center for the Computer contract for the catalog purchase of hardware. HP will work with WSCA/NASPO on an eMarket Center based on the hosting levels that may be available through SciQuest and HP for a seat management services solution as mutually agreed by the parties.

ADDITIONAL PROVISIONS

HP respectfully requests the inclusion of the Additional Provisions relevant to the sale, support and use of technology constituting a purchase contract.

Intellectual Property Rights. No transfer of ownership of any intellectual property will occur under this Agreement. Customer grants HP a non-exclusive, worldwide, royalty-free right and license to any intellectual property that is necessary for HP and its designees to perform the ordered services. If deliverables are created by HP specifically for Customer and identified as such in Supporting Material, HP hereby grants Customer a worldwide, non-exclusive, fully paid, royalty-free license to reproduce and use copies of the deliverables internally.

Intellectual Property Rights Infringement. HP will defend and/or settle any claims against Customer that allege that an HP-branded product or service as supplied under this Agreement infringes the intellectual property rights of a third party. HP will rely on Customer's prompt notification of the claim and cooperation with our defense. HP may modify the product or service so as to be non-infringing and materially equivalent, or we may procure a license. If these options are not available, we will refund to Customer the amount paid for the affected product in the first year or the depreciated value thereafter or, for support services, the balance of any pre-paid amount or, for professional services, the amount paid. HP is not responsible for claims resulting from any unauthorized use of the products or services. This section shall also apply to deliverables identified as such in the relevant Support Material except that HP is not responsible for claims resulting from deliverables content or design provided by Customer.

License Term and Termination. Unless otherwise specified, any license granted is perpetual, provided however that if Customer fails to comply with the terms of this Agreement, and lease

agreement (as applicable), HP may terminate the license upon written notice. Immediately upon termination, or in the case of a limited-term license, upon expiration, Customer will either destroy all copies of the software or return them to HP, except that Customer may retain one copy for archival purposes only.

Confidentiality. Information exchanged under this Agreement will be treated as confidential if identified as such at disclosure or if the circumstances of disclosure would reasonably indicate such treatment. Confidential information may only be used for the purpose of fulfilling obligations or exercising rights under this Agreement, and shared with employees, agents or contractors with a need to know such information to support that purpose. Confidential information will be protected using a reasonable degree of care to prevent unauthorized use or disclosure for 3 years from the date of receipt or (if longer) for such period as the information remains confidential. These obligations do not cover information that: i) was known or becomes known to the receiving party without obligation of confidentiality; ii) is independently developed by the receiving party; or iii) where disclosure is required by law or a governmental agency.

Personal Information. Each party shall comply with their respective obligations under applicable data protection legislation. HP does not intend to have access to personally identifiable information ("**PII**") of Customer in providing services. To the extent HP has access to Customer PII stored on a system or device of Customer, such access will likely be incidental and Customer will remain the data controller of Customer PII at all times. HP will use any PII to which it has access strictly for purposes of delivering the services ordered.

Global Trade compliance. Services and products/deliverables provided under these terms are for Customer's internal use and not for further commercialization. If Customer exports, imports or otherwise transfers products and/or deliverables provided under these terms, Customer will be responsible for complying with applicable laws and regulations and for obtaining any required export or import authorizations. HP may suspend its performance under this Agreement to the extent required by laws applicable to either party.

Orders. "**Order**" means the accepted order including any supporting material which the parties identify as incorporated either by attachment or reference ("**Supporting Material**"). Supporting Material may include (as examples) specifications, standard or negotiated service descriptions, data sheets and their supplements, and statements of work (SOWs), published warranties and service level agreements, and may be available to Customer in hard copy or by accessing a designated HP website. Where appropriate, Orders must specify a service delivery date. If Customer extends the service delivery date of an existing Order beyond ninety (90) days, then it will be considered a new Order.

Risk of Loss and Title. Risk of loss or damage and title for hardware products will pass upon delivery to Customer or its designee. Notwithstanding the foregoing, title to leased products remains with Lessor or its permitted assignee, unless expressly state otherwise within the applicable Lease Agreement. Where permitted by law, HP retains a security interest in products sold until full payment is received.

Delivery. HP will use all commercially reasonable efforts to deliver products in a timely manner. HP may elect to deliver software and related product/license information by electronic transmission or via download.

Installation. If HP is providing installation with the product purchase, HP's site guidelines (available upon request) will describe Customer requirements. HP will conduct its standard installation and test procedures to confirm completion.

Support Services. HP's support services will be described in the applicable Supporting Material, which will cover the description of HP's offering, eligibility requirements, service limitations and Customer responsibilities, as well as the Customer systems supported.

Warranties:

Product Performance. All HP-branded hardware products are covered by HP's limited warranty statements that are provided with the products or otherwise made available. Hardware warranties begin on the date of delivery or if applicable, upon completion of HP installation, or (where Customer delays HP installation) at the latest 30 days from the date of delivery. Non-HP branded products receive warranty coverage as provided by the relevant third party supplier.

Software Performance. HP warrants that its branded software products will conform materially to their specifications and be free of malware at the time of delivery. HP warranties for software products will begin on the date of delivery and unless otherwise specified in Supporting Material, will last for ninety (90) days. HP does not warrant that the operation of software products will be uninterrupted or error-free or that software products will operate in hardware and software combinations other than as authorized by HP in Supporting Material.

Product Warranty Claims. When we receive a valid warranty claim for an HP hardware or software product, HP will either repair the relevant defect or replace the product. If HP is unable to complete the repair or replace the product within a reasonable time, Customer will be entitled to a full refund upon the prompt return of the product to HP (if hardware) or upon written confirmation by Customer that the relevant software product has been destroyed or permanently disabled. HP will pay for shipment of repaired or replaced products to Customer and Customer will be responsible for return shipment of the product to HP.

Third party products. To the extent HP offers products of other manufacturers or developers, those products may be accompanied by warranties from their manufacturers or developers that would enable the Purchasing Entity to obtain warranty and maintenance services for those products during the warranty periods. HP will pass along to each Purchasing Entity any product warranties from such manufacturers or developers.

Services Performance. Services are performed using generally recognized commercial practices and standards. Customer agrees to provide prompt notice of any such service concerns and HP will re-perform any service that fails to meet that standard.

Services with Deliverables. If Supporting Material for services define specific deliverables, HP warrants those deliverables will conform materially to their written specifications for 30 days following delivery. If Customer notifies HP of such a non-conformity during the 30 day period HP will promptly remedy the impacted deliverables or refund to Customer the fees paid for those deliverables and Customer will return those deliverables to HP.

Eligibility. HP's service, support and warranty commitments do not cover claims resulting from:

- improper use, site preparation, or site or environmental conditions or other non-compliance with applicable Supporting Material;
- Modifications or improper system maintenance or calibration not performed by HP or authorized by HP;
- failure or functional limitations of any non-HP software or product impacting systems receiving HP support or service;
- malware (e.g. virus, worm, etc.) not introduced by HP; or
- abuse, negligence, accident, fire or water damage, electrical disturbances, transportation by Customer, or other causes beyond HP's control.

Remedies. This Agreement states all remedies for warranty claims. To the extent permitted by law, HP disclaims all other warranties.

Professional Services. HP will deliver any ordered IT consulting, training or other services as described in the applicable Supporting Material.

Professional Services Acceptance. The acceptance process (if any) will be described in the applicable Supporting Material, will apply only to the deliverables specified, and shall not apply to other products or services to be provided by HP.

Dependencies. HP's ability to deliver services will depend on Customer's reasonable and timely cooperation and the accuracy and completeness of any information from Customer needed to deliver the services.

Change Orders. We each agree to appoint a project representative to serve as the principal point of contact in managing the delivery of services and in dealing with issues that may arise. Requests to change the scope of services or deliverables will require a change order signed by both parties.

Limitation of Liability. HP's liability to Customer under this Agreement is limited to the greater of $1,000,000 or the amount payable by Customer to HP for the relevant Order. Neither Customer nor HP will be liable for lost revenues or profits, downtime costs, loss or damage to data or indirect, special or consequential costs or damages. This provision does not limit either party's liability for: unauthorized use of intellectual property, death or bodily injury caused by their negligence; acts of fraud; willful repudiation of the Agreement; nor any liability which may not be excluded or limited by applicable law.

Disputes. If Customer is dissatisfied with any services purchased under these terms and disagrees with HP's proposed resolution, we both agree to promptly escalate the issue to a Vice

President (or equivalent executive) in our respective organizations for an amicable resolution without prejudice to the right to later seek a legal remedy.

Order of Precedence. Documents will apply in the following descending order of precedence:

1. Financing Agreement (MLPA or MOLA);
2. The Participating Addendum;
3. the sections of this Master Agreement;
4. the Statement of Work;
5. all Supporting Materials.

Survival. Any terms in the Agreement which by their nature extend beyond termination or expiration of the Agreement will remain in effect until fulfilled and will apply to both parties' respective successors and permitted assigns.

FINANCING TERMS AND CONDITIONS:

For financing, Hewlett-Packard Company ("HP") is responding as the Lessor with the express intent to assign Purchasing Entity Lease Agreements and Lease Schedules to Hewlett-Packard Financial Services ("HPFS"). The terms and conditions of these finance options are represented in the enclosed Master Lease Agreements below. Any service level agreements and requirements will be the responsibility of HP, the supplier of the equipment. The precedent and separate terms and conditions applicable to financing are described and reflected exclusively in the State and Local Government Master Lease Purchase Agreement (HP Appendix B—Master Lease Purchase Agreement), or the State and Local Government Master Operating Lease (HP Appendix C—Master Operating Lease Agreement) included in this proposal ("Master Lease Agreements"). Master Lease Purchase Agreements are expressly conditioned on the transaction qualifying for tax-free municipal lease treatment under the Internal Revenue Code. The Cost Proposal rates are based on a 4 year term, Master Lease financing arrangement.

HP Appendices

HP Appendix A—Certificate of Liability Insurance

HP Appendix B—Master Lease Purchase Agreement

HP Appendix C—Master Operating Lease Agreement

HP Appendix D— Professional Development Partners and Programs

HP Appendix A—Certificate of Liability Insurance

Proposal Reference: Section I, question 2c

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/3/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Marsh Risk and Insurance Services, Inc.
CA License #0437153
777 S. Figueroa Street
Los Angeles, CA 90017

CONTACT NAME: Sylvia A Miller
PHONE (A/C, No, Ext): 916-251-7130 FAX (A/C, No):
EMAIL ADDRESS: smiller@hp.com

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Old Republic Insurance Co.	24147
INSURER B:	Tall Tree Insurance Co	
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED

Hewlett-Packard Company
3000 Hanover Street
Palo Alto, CA 94304

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** ☒ COMMERICAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☐ ____ ☐ ____ GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC			MWZY 59745	9/30/2012	9/30/2013	EACH OCCURRENCE	$ 2,500,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 2,500,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 2,500,000
							GENERAL AGGREGATE	$ Not Applicable
							PRODUCTS - COMP/OP AGG	$ Not Applicable
								$
A	**AUTOMOBILE LIABILITY** ☐ ANY AUTO ☒ ALL OWNED AUTOS ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ☒ NON-OWNED AUTOS ☒ LEASED ☐ ____			MWTB 21679	9/30/2012	9/30/2013	COMBINED SINGLE LIMIT (Ea accident)	$ 2,500,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
B	☐ **UMBRELLA LIAB** ☐ OCCUR ☒ **EXCESS LIAB** ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $			470-1XL0076 ***XS 2.5M SIR*** ***OR UNDERLYING POLICY***	9/30/2012	9/30/2013	EACH OCCURRENCE	$ 500,000
							AGGREGATE	$ 500,000
								$
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N ☐ **(MANDATORY IN NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		MWC 11790100 "As respects WC only, all states, except CA, WA, OH and Monopolistic States"	9/30/2012	9/30/2013	☒ WC STATU-TORY LIMITS ☐ OTHER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

State of Maine Department of Education
23 State House Station
Augusta, ME 04333

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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HP Appendix B—Master Lease Purchase Agreement

Proposal Reference: Appendix D—NASPO Standard Terms and Conditions, section Financing Terms and Conditions

Master Agreement Number _____

Lessee's Organization Number __
Lessee's Tax Identification Number _____
Lessee's UCC Section 9-307 Location _____

STATE AND LOCAL GOVERNMENT MASTER LEASE PURCHASE AGREEMENT

This State and Local Government Master Lease Purchase Agreement (together with Exhibits A and B attached hereto and hereby made a part hereof, (this "Master Agreement"), dated as of _____, is entered into by and between Hewlett-Packard Company, a Delaware corporation ("Lessor"), and _____, an agency, department or political subdivision of the State of _____ ("Lessee"). Capitalized terms used in this Master Agreement without definition have the meanings ascribed to them in Section 31.

1. PURPOSE OF MASTER AGREEMENT. The purpose of this Master Agreement is to set forth the general terms and conditions upon which Lessor shall lease to Lessee, and Lessee shall lease from Lessor, items of Hardware, Software or both (the "Equipment"). In connection with its execution of this Master Agreement, Lessee shall deliver to Lessor an Officer's Certificate in form and substance acceptable to Lessor, executed by a duly authorized officer of Lessee and certifying as to, among other things, Lessee's authority to enter into this Master Agreement, and the authority of Lessee's officers or representatives specified therein to execute this Master Agreement and an opinion of Lessee's counsel in form and content satisfactory to Lessor.

2. COMMENCEMENT PROCEDURES. Subject to the other terms and conditions contained in this Master Agreement and the applicable Schedule, Lessee shall enter into individual Leases (hereinafter defined) with Lessor as follows:

(a) Execution of Schedule. Lessor and Lessee mutually agree to enter into a Lease by executing a Schedule in the form of Exhibit A with such changes as Lessor and Lessee shall have agreed to as conclusively evidenced by their execution thereof. Each such Schedule shall specifically identify (by serial number or other identifying characteristics) the items of Equipment to be leased under such Schedule. Each Schedule, when executed by both Lessee and Lessor, together with this Master Agreement, shall constitute a separate and distinct lease ("Lease"), enforceable according to its terms. In the event of any conflict between the terms of this Master Agreement and such Schedule, the provisions of the Schedule shall govern.

(b) Acceptance; Term of Leases. Lessee shall accept the Equipment subject to a Lease in accordance with Section 3. The Term of each Lease shall begin on the Acceptance Date of the Equipment subject to such Lease and shall continue for the period described in the applicable Schedule unless a Nonappropriation shall have occurred.

(c) Adjustments to Schedule. Lessee acknowledges that the Total Cost of Equipment and the related Rent payments set forth in any Schedule may be estimates, and if the final invoice from the Seller attached to the related Acceptance Certificate(s) specifies a Total Cost that is less than the estimated Total Cost set forth in the Schedule, Lessee hereby authorizes Lessor to reduce the applicable Total Cost and Rent payment on the Schedule by up to ten percent (10%) to reflect such final invoice amount (the "Final Invoice Amount"). All references in this Master Agreement and any Schedule to Total Cost and Rent shall mean the amounts thereof specified in the applicable Schedule, as adjusted pursuant to this paragraph.

(d) Payment by Lessor. Within 30 days after Lessee's delivery to Lessor of a properly completed and executed Acceptance Certificate and all other documentation necessary to establish Lessee's acceptance of such Equipment under the related Lease and Lessor's acceptance of such Acceptance Certificate, Lessor shall pay for the Equipment. Lessor shall not accept the Acceptance Certificate until it has received from Lessee (1) evidence of insurance with respect to the Equipment in compliance with Section 14 hereof, (2) a completed and executed original Form 8038-G or 8038-GC, as applicable, or evidence of filing thereof with the Internal Revenue Service in the manner required by Code Section 149(e), (3) an opinion of Lessee's counsel, if required by Lessor, in form and substance reasonably satisfactory to Lessor and (4) any other documents or items reasonably required by Lessor. Notwithstanding the foregoing, Lessor shall not be obligated to pay for the Equipment if a Lessee Default has occurred or an event has occurred and is continuing that with the passage of time or provision of notice would constitute a Lessee Default. Lessor and Lessee acknowledge that the date the Lessor pays for the Equipment shall be the issue date of the obligation for federal income tax purposes in accordance with the Code and no Rent shall accrue prior to such date.

3. ACCEPTANCE OF EQUIPMENT. (a) Inspection of Equipment. Lessee agrees to inspect all Equipment as soon as reasonably practicable after the delivery thereof to Lessee.

(b) Acceptance Certificate. Upon the satisfactory inspection of the Equipment by Lessee, or if acceptance requirements for such Equipment are specified in the applicable Purchase Documents, as soon as such requirements are met, Lessee shall unconditionally and irrevocably accept the Equipment by executing and delivering to Lessor a properly completed Acceptance Certificate in substantially the form of Exhibit B.

4. RENT; LATE CHARGES. As rent ("Rent") for the Equipment under any Lease, Lessee agrees to pay the amounts specified in the applicable Schedule on the due dates specified in the applicable Schedule. Lessee agrees to pay Lessor interest on any Rent payment or other amount due hereunder that is not paid within 10 days of its due date, at the rate of 1-1/2% per month (or such lesser rate as is the maximum rate allowable under applicable law). Lessee will make provision for such payments in budgets submitted to its governing body for the purpose of obtaining funding for the payments.

5. TRANSFER OF EQUIPMENT ON EXPIRATION OF LEASE TERM. If Lessee has paid all Rent and all other amounts due under the Lease and has satisfied all other terms and conditions of the Lease, the Lease shall terminate and, except as provided in Section 28, Lessee shall be relieved of all of its obligations in favor of Lessor with respect to the Equipment and Lessor shall transfer all of its interest in such Equipment to Lessee "AS IS, WHERE IS," without any warranty, express or implied, from Lessor, other than the absence of any liens or claims by or through Lessor.

6. LEASES NON-CANCELABLE; NET LEASES; WAIVER OF DEFENSES TO PAYMENT. IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT EACH LEASE HEREUNDER SHALL BE NON-CANCELABLE (EXCEPT AS SET FORTH IN SECTION 7 HEREOF), AND THAT EACH LEASE HEREUNDER IS A NET LEASE SO THAT AMONG OTHER THINGS LESSEE SHALL PAY IN ADDITION TO THE RENT, TAXES, INSURANCE AND MAINTENANCE CHARGES RELATED TO THE EQUIPMENT. LESSEE AGREES THAT IT HAS AN ABSOLUTE AND UNCONDITIONAL OBLIGATION TO PAY ALL RENT AND OTHER AMOUNTS WHEN DUE. LESSEE HEREBY WAIVES ANY RECOUPMENT, CROSS-CLAIM, COUNTERCLAIM OR ANY OTHER DEFENSE AT LAW OR IN EQUITY TO ANY RENT OR OTHER AMOUNT DUE WITH RESPECT TO ANY LEASE, WHETHER ANY SUCH DEFENSE ARISES OUT OF THIS MASTER AGREEMENT, ANY SCHEDULE, ANY CLAIM BY LESSEE AGAINST LESSOR, LESSOR'S ASSIGNEES OR SUPPLIER OR OTHERWISE. IF THE EQUIPMENT IS NOT PROPERLY INSTALLED, DOES NOT OPERATE OR INTEGRATE AS REPRESENTED OR WARRANTED BY SUPPLIER OR IS UNSATISFACTORY FOR ANY REASON WHATSOEVER, LESSEE

WILL MAKE ANY CLAIM ON ACCOUNT OF THOSE ISSUES SOLELY AGAINST SUPPLIER AND WILL NEVERTHELESS PAY ALL SUMS DUE WITH RESPECT TO EACH LEASE.

7. NONAPPROPRIATION. Notwithstanding anything contained in this Master Agreement to the contrary, in the event that sufficient funds are not appropriated and budgeted by Lessee's governing body or are not otherwise available from other legally available sources in any fiscal period for the payment of Rent and other amounts due under any Lease, the Lease shall terminate on the last day of the fiscal period for which appropriations were received or other amounts are available to pay amounts due under the Lease without penalty or expense to Lessee of any kind whatsoever, except as to the portions of Rent payments or other amounts herein agreed upon for which funds shall have been appropriated or are otherwise available. Lessee will immediately notify the Lessor or its assignee of such occurrence. In the event of such termination, Lessee shall immediately cease all use of the Equipment, and shall, at its sole expense and risk, immediately de-install, disassemble, pack, crate, insure, and return the Equipment subject to such Lease to Lessor (all in accordance with Section 10 of this Master Agreement). Such Equipment shall be in the same condition as when received by Lessee (reasonable wear, tear and depreciation resulting from normal and proper use excepted), shall be in good operating order and maintenance as required by this Lease, shall be free and clear of any liens (except Lessor's lien) and shall comply with all applicable laws and regulations. Lessee agrees to execute and deliver to Lessor all documents reasonably requested by Lessor or evidence the transfer of legal and beneficial title to such Equipment to Lessor and to evidence the termination of Lessee's interest in such Equipment. Lessor will have all legal and equitable rights and remedies to take possession of the Equipment. At Lessor's request, Lessee shall promptly provide supplemental documentation as to such Non-Appropriation satisfactory to Lessor. Lessee's exercise of its rights pursuant to this Section 7 shall not affect the survival of any indemnity and other provisions (other than the obligation to lease the Equipment and pay amounts due under the Lease) which survive the termination of the Lease.

8. ASSIGNMENT OF PURCHASE DOCUMENTS. Lessee assigns to Lessor all of Lessee's right, title and interest in and to (a) the Equipment described in each Schedule, and (b) the Purchase Documents relating to such Equipment. Such assignment of the Purchase Documents is an assignment of rights only; nothing in this Master Agreement shall be deemed to have relieved Lessee of any obligation or liability under any of the Purchase Documents, except that, as between Lessee and Lessor, Lessor shall pay for the Equipment in accordance with Section 2(d) hereof. Lessee represents and warrants that it has reviewed and approved the Purchase Documents. In addition, if Lessor shall so request, Lessee shall deliver to Lessor a document acceptable to Lessor whereby Seller acknowledges and provides any required consent to such assignment. For the avoidance of doubt, Lessee covenants and agrees that it shall at all times during the Term of each Lease comply in all respects with the terms of any License Agreement relating to any Equipment leased thereunder. **IT IS ALSO SPECIFICALLY UNDERSTOOD AND AGREED THAT NEITHER SUPPLIER NOR ANY SALESPERSON OF SUPPLIER IS AN AGENT OF LESSOR, NOR ARE THEY AUTHORIZED TO WAIVE OR ALTER ANY TERMS OF THIS MASTER AGREEMENT OR ANY SCHEDULE.**

9. ASSIGNMENT OF SUPPLIER WARRANTIES. To the extent permitted, Lessor hereby assigns to Lessee all Equipment warranties provided by any Supplier in the applicable Purchase Documents. Lessee shall have the right to take any action it deems appropriate to enforce such warranties provided such enforcement is pursued in Lessee's name and at its expense. In the event Lessee is precluded from enforcing any such warranty in its name and to the extent Lessor retains title to the Equipment, Lessor shall, upon Lessee's request, take reasonable steps to enforce such warranty. In such circumstances, Lessee shall, promptly upon demand, reimburse Lessor for all expenses incurred by Lessor in enforcing the Supplier warranty. Any recovery resulting from any such enforcement efforts shall be divided between Lessor and Lessee as their interests may appear.

10. EQUIPMENT RETURN REQUIREMENTS. At any time Lessee is required to return Equipment to Lessor under the terms of this Master Agreement or any Schedule, Lessee shall (a) wipe clean or permanently delete all data contained on the Equipment, including without limitation, any data contained on internal or external drives, discs, or accompanying media, and (b) pack the Equipment to be returned to Lessor in accordance with the manufacturer's guidelines and deliver such Equipment to Lessor at any destination within the continental United States designated by Lessor. In the case of any item of Software or License Agreement subject to a Schedule, at the time of the occurrence of a Non-Appropriation or a Lessee Default, Lessee shall also be automatically deemed to have reassigned any License Agreement, and shall immediately de-install and deliver to Lessor all Software, together with the original certificate of authenticity issued by the licensor of such Software, if any. All dismantling, packaging, transportation, in-transit insurance and shipping charges shall be borne by Lessee. All Equipment shall be returned to Lessor in the same condition and working order as when delivered to Lessee, reasonable wear and tear excepted, and except in the case of PC Equipment and Software, shall qualify for maintenance service by the Supplier at its then standard rates for Equipment of that age, if available. Lessee shall be responsible for, and shall reimburse Lessor promptly on demand for, the cost of returning the Equipment to good working condition or, in the case of Equipment other than PC Equipment and Software, qualifying the Equipment for the Supplier's maintenance service, if available.

11. EQUIPMENT USE, MAINTENANCE AND ADDITIONS. Lessee is solely responsible for the selection, installation, operation and maintenance of the Equipment and all costs related thereto, including shipping charges. Lessee shall at all times operate and maintain the Equipment in good working order, repair, condition and appearance, and in accordance with the manufacturer's specifications and recommendations. On reasonable prior notice to Lessee, Lessor and Lessor's agents shall have the right, during Lessee's normal business hours and subject to Lessee's reasonable, standard security procedures, to enter the premises where the Equipment is located for the purpose of inspecting the Equipment and observing its use. Except in the case of PC Equipment and Software, Lessee shall, at its expense, enter into and maintain and enforce at all times during the Term of each Lease a maintenance agreement to service and maintain the related Equipment, upon terms and with a provider reasonably acceptable to Lessor. Lessee shall make no alterations or additions to the Equipment, except those that (a) will not void any warranty made by the Supplier of the Equipment, result in the creation of any security interest, lien or encumbrance on the Equipment or impair the value or use of the Equipment either at the time made or at the end of the Term of the applicable Lease, and are readily removable without damage to the Equipment ("Optional Additions"), or (b) are required by any applicable law, regulation or order. All additions to the Equipment or repairs made to the Equipment, except Optional Additions, become a part of the Equipment and Lessor's property at the time made; Optional Additions which have not been removed in the event of the return of the Equipment shall become Lessor's property upon such return.

12. EQUIPMENT OWNERSHIP; LIENS; LOCATION. Upon acceptance of the Equipment by Lessee hereunder, title to the Equipment will vest in Lessee; provided, however, that (i) in the event of termination of this Lease by Lessee pursuant to Section 7 hereof, or (ii) upon the occurrence of a Lessee Default as defined in Section 22 hereof, and as long as such Lessee Default is continuing, title to the Equipment (including Substitute Equipment) will immediately vest in Lessor or its assignee. Lessee covenants with respect to each Lease that: (i) it will not pledge or encumber the Equipment or Lessor's interest in the Equipment in any manner whatsoever nor create or permit to exist any levy, lien or encumbrance thereof or thereon except those created by or through Lessor; (ii) the Equipment shall remain personal property whether or not affixed to realty and shall not become a fixture or be made to become a part of any real property on which it is placed without Lessor's prior written consent; and (iii) Lessee shall maintain the Equipment so that it does not become essential to and may be removed from any building in which it is placed without any damage to the building or the Equipment. Provided Lessee remains in possession and control of the Equipment, Lessee may relocate any Equipment from the Equipment Location specified in the applicable Schedule to another of its locations within the State of the Equipment Location upon prior written notice to Lessor specifying the new Equipment Location or to another of its locations within the United States after receiving the written consent of Lessor to such relocation. Lessee shall not locate or relocate any Equipment such that any third party comes into possession or control thereof without Lessor's prior written consent; provided, however, that Lessor shall not unreasonably withhold its consent to the location or relocation of Equipment to a third party co-location or hosting facility if such third party shall have executed and delivered to Lessor a waiver agreement in form and substance acceptable to Lessor pursuant to which, among other things, such third party shall have waived any rights to the Equipment and agreed to surrender the Equipment to Lessor in the event of a Lessee Default under this Master Agreement. Notwithstanding the foregoing, Lessor agrees that computer equipment usable outside of a fixed office environment, such as laptops, notebooks or similar PC

Equipment (collectively, "Mobile PC Equipment") may be relocated on a non-permanent basis from the Equipment Location originally specified in the applicable Schedule without Lessor's prior written consent, provided that (i) such relocation is made by Lessee's primary employee in the custody and control of such Mobile PC Equipment; (ii) the primary employee remains in possession and control of the Mobile PC Equipment, and (iii) the primary employee's principal office is the Equipment Location. For purposes of this Master Agreement and any applicable Schedule, the term Equipment shall be deemed to include all Mobile PC Equipment.

13. SECURITY INTEREST; MAXIMUM RATE. In order to secure all of its obligations hereunder, Lessee hereby, to the extent permitted by law and to secure payment and performance of Lessee's obligations under this Master Agreement and all Leases, grants Lessor a purchase money security interest in the related Equipment and in all attachments, accessories, additions, substitutions, products, replacements, rentals and proceeds (including, without limitation, insurance proceeds) thereto as well as a security interest in any other Equipment financed pursuant to this Master Agreement or any other agreement between Lessor and Lessee (collectively, the "Collateral"). In any such event, notwithstanding any provisions contained in this Master Agreement or in any Schedule, neither Lessor nor any Assignee shall be entitled to receive, collect or apply as interest any amount in excess of the maximum rate or amount permitted by applicable law. In the event Lessor or any Assignee ever receives, collects or applies as interest any amount in excess of the maximum amount permitted by applicable law, such excess amount shall be applied to the unpaid principal balance and any remaining excess shall be refunded to Lessee. In determining whether the interest paid or payable under any specific contingency exceeds the maximum rate or amount permitted by applicable law, Lessor and Lessee shall, to the maximum extent permitted under applicable law, characterize any non-principal payment as an expense or fee rather than as interest, exclude voluntary prepayments and the effect thereof, and spread the total amount of interest over the entire term of this Master Agreement and all Leases. Lessee agrees that Lessor may file this Lease as a financing statement evidencing such security interest or any other financing statement deemed necessary by Lessor and agrees to execute and deliver all certificates of title and other instruments necessary or appropriate to evidence such security interest.

14. RISK OF LOSS AND INSURANCE. Lessee assumes any and all risk of loss or damage to the Equipment from the time such Equipment is delivered to Lessee until such Equipment is returned to and is received by Lessor in accordance with the terms and conditions of this Master Agreement. Lessee agrees to keep the Equipment insured at Lessee's expense against all risks of loss from any cause whatsoever, including without limitation, loss by fire (including extended coverage), theft and damage. Lessee agrees that such insurance shall name Lessor as a loss payee and cover not less than the Stipulated Loss Value of the Equipment. Lessee also agrees that it shall carry commercial general liability insurance in an amount not less than $2,000,000 total liability per occurrence and cause Lessor and its affiliates and its and their successors and assigns, to be named additional insureds under such insurance. Each policy shall provide that the insurance cannot be canceled without at least 30 days' prior written notice to Lessor, and no policy shall contain a deductible in excess of $25,000. Upon Lessor's prior written consent, in lieu of maintaining insurance obtained by third party insurance carriers, Lessee may self insure against such risks, provided that Lessor's interests are protected to the same extent as if the insurance had been obtained by third party insurance carriers and provided further that such self insurance program is consistent with prudent business practices with respect with such insurance risk. Lessee shall provide to Lessor (a) on or prior to the Acceptance Date for each Lease, and from time to time thereafter, certificates of insurance evidencing such insurance coverage throughout the Term of each Lease, and (b) upon Lessor's request, copies of the insurance policies. If Lessee fails to provide Lessor with such evidence, then Lessor will have the right, but not the obligation, to purchase such insurance protecting Lessor at Lessee's expense. Lessee's expense shall include the full premium paid for such insurance and any customary charges, costs or fees of Lessor. Lessee agrees to pay such amounts in substantially equal installments allocated to each Rent payment (plus interest on such amounts at the rate of 1-1/2% per month or such lesser rate as is the maximum rate allowable under applicable law).

15. CASUALTY LOSS. Lessee shall notify Lessor of any Casualty Loss or repairable damage to any Equipment as soon as reasonably practicable after the date of any such occurrence but in no event later than 30 days after such occurrence. In the event any Casualty Loss shall occur, on the next Rent payment date Lessee shall (a) at Lessee's option provided no Lessee Default has occurred nor an event that with the passage of time or provision of notice would constitute a Lessee Default has occurred and is continuing or (b) at Lessor's option if a Lessee Default has occurred or an event that with the passage of time or provision of notice would constitute a Lessee Default has occurred and is continuing, (1) subject to Section 7 hereof, pay Lessor the Stipulated Loss Value of the Equipment suffering the Casualty Loss, or (2) substitute and replace each item of Equipment suffering the Casualty Loss with an item of Substitute Equipment. If Lessee shall pay the Stipulated Loss Value of the Equipment suffering a Casualty Loss, upon Lessor's receipt in full of such payment the applicable Lease shall terminate as it relates to such Equipment and, except as provided in Section 28, Lessee shall be relieved of all obligations under the applicable Lease as it relates to such Equipment. If Lessee shall replace Equipment suffering a Casualty Loss with items of Substitute Equipment the applicable Lease shall continue in full force and effect without any abatement of Rent with such Substitute Equipment thereafter being deemed to be Equipment leased thereunder. Upon Lessor's receipt of such payment of Stipulated Loss Value in full or replacement of the Equipment suffering the Casualty Loss with Substitute Equipment, Lessor shall transfer to Lessee all of Lessor's interest in the Equipment suffering the Casualty Loss "AS IS, WHERE IS," without any warranty, express or implied, from Lessor, other than the absence of any liens or claims by or through Lessor. In the event of any repairable damage to any Equipment, the Lease shall continue with respect to such Equipment without any abatement of Rent and Lessee shall, at its expense, from insurance proceeds or other funds legally available, promptly cause such Equipment to be repaired to the condition it is required to be maintained pursuant to Section 11.

16. TAXES. Lessor shall report and pay all Taxes now or hereafter imposed or assessed by any governmental body, agency or taxing authority upon the purchase, ownership, delivery, installation, leasing, rental, use or sale of the Equipment, the Rent or other charges payable hereunder, or otherwise upon or in connection with any Lease, whether assessed on Lessor or Lessee, other than any such Taxes required by law to be reported and paid by Lessee. Lessee shall promptly reimburse Lessor for all such Taxes paid by Lessor, together with any penalties or interest in connection therewith attributable to Lessee's acts or failure to act, excluding (a) Taxes on or measured by the overall gross or net income or items of tax preference of Lessor, (b) as to any Lease the related Equipment, Taxes attributable to the period after the return of such Equipment to Lessor, and (c) Taxes imposed as a result of a sale or other transfer by Lessor of any portions of its interest in any Lease or in any Equipment except for a sale of other transfer to Lessee or a sale or other transfer occurring after and during the continuance of any Lessee Default.

17. GENERAL INDEMNITY. Lessee, to the extent permitted by law, shall indemnify and hold harmless Lessor and assignees, from and against any and all Claims arising directly or indirectly out of or in connection with any matter involving this Master Agreement, the Equipment or any Lease, including but not limited to the selection, manufacture, purchase, acceptance, rejection, ownership, delivery, lease, possession, maintenance, use (including any patent, trademark or copyright infringement), condition, return or operation of any Equipment or the enforcement of Lessor's rights under any Lease. Notwithstanding the foregoing, Lessee shall have no obligation to indemnify or defend against any Claim arising solely as a result of Lessor's gross negligence or willful misconduct**.**

18. TAX REPRESENTATIONS AND COVENANTS AND TAX PAYMENTS. (a) Lessee represents, covenants and warrants that: (i) Lessee is a political subdivision or agency or department of the State in which it is located; (ii) a portion of the Rent is interest based on the total Equipment cost as shown on a Schedule and such interest portion of the Rent shall be excluded from Lessor's gross income pursuant to Section 103 of the Code; (iii) Lessee will comply with the information reporting requirements of Section 149(e) of the Code, and such compliance shall include but not be limited to the execution of information statements requested by Lessor; (iv) Lessee will not do or cause to be done any act which will cause, or by omission of any act allow, the Lease to be an arbitrage bond within the meaning of Section 148(a) of the Code; (v) Lessee will not do or cause to be done any act which will cause, or by omission of any act allow, this Lease to be a private activity bond within the meaning of Section 141(a) of the Code; (vi) Lessee will not do or cause to be done any act which will cause, or by omission of any act allow, the interest portion of the Rent payments to be or become includable in gross income for federal income taxation purposes under the Code; (vii) Lessee will be the only entity to own, use and operate the Equipment during the Lease Term; (viii) Lessee has never failed to appropriate funds for payment of any amount due pursuant to a lease

purchase agreement, a conditional sales agreement or any similar type of obligation; and (ix) Lessee is not and has never been in default under any bond, note, lease purchase agreement or other type of financial obligation to which it has been a party.

(b) This Master Agreement has been entered into on the basis that Lessor or any Assignee of Lessor shall claim that the interest paid hereunder is exempt from federal income tax under Section 103(a) of the Code. Upon a breach by Lessee of any of its representations, warranties and covenants in Section 18(a) above and as a result thereof, the United States Government disallows, eliminates, reduces, recaptures, or disqualifies, in whole or in part, any benefits of such exemption, Lessee shall then pay to Lessor, at Lessor's election, either: (i) supplemental payment(s) to Lessor during the remaining period of the Term(s) in an amount necessary to permit Lessor to receive (on an after tax basis over the full term of the Master Agreement) the same rate of return that Lessor would have realized had there not been a loss or disallowance of such benefits, together with the amount of any interest or penalty which may be assessed by the governmental authority with respect to such loss or disallowance; or (ii) a lump sum payable upon demand to Lessor which shall be equal to the amount necessary to permit Lessor to receive (on an after tax basis over the full term of the Master Agreement) the same rate of return that Lessor would have realized had there not been a loss or disallowance of such benefits together with the amount of any interest or penalty which may be assessed by the governmental authority with respect to such loss or disallowance.

19. COVENANT OF QUIET ENJOYMENT. So long as no Lessee Default exists, and no event shall have occurred and be continuing which, with the giving of notice or the passage of time or both, would constitute a Lessee Default, neither Lessor nor any party acting or claiming through Lessor, by assignment or otherwise, will disturb Lessee's quiet enjoyment of the Equipment during the Term of the related Lease.

20. DISCLAIMERS AND LESSEE WAIVERS. LESSEE LEASES THE EQUIPMENT FROM LESSOR "AS IS, WHERE IS." IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT (A) EXCEPT AS EXPRESSLY SET FORTH IN SECTION 19, LESSOR MAKES ABSOLUTELY NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE DESIGN, COMPLIANCE WITH SPECIFICATIONS, QUALITY, OPERATION, OR CONDITION OF ANY EQUIPMENT (OR ANY PART THEREOF), THE MERCHANTABILITY OR FITNESS OF EQUIPMENT FOR A PARTICULAR PURPOSE, OR ISSUES REGARDING PATENT INFRINGEMENT, TITLE AND THE LIKE; (B) LESSOR SHALL NOT BE DEEMED TO HAVE MADE, BE BOUND BY OR LIABLE FOR, ANY REPRESENTATION, WARRANTY OR PROMISE MADE BY THE SUPPLIER OF ANY EQUIPMENT (EVEN IF LESSOR IS AFFILIATED WITH SUCH SUPPLIER); (C) LESSOR SHALL NOT BE LIABLE FOR ANY FAILURE OF ANY EQUIPMENT OR ANY DELAY IN THE DELIVERY OR INSTALLATION THEREOF; (D) LESSEE HAS SELECTED ALL EQUIPMENT WITHOUT LESSOR'S ASSISTANCE; AND (E) LESSOR IS NOT A MANUFACTURER OF ANY EQUIPMENT. IT IS FURTHER AGREED THAT LESSOR SHALL HAVE NO LIABILITY TO LESSEE, OR ANY THIRD PARTIES FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS MASTER AGREEMENT OR ANY SCHEDULE OR CONCERNING ANY EQUIPMENT, OR FOR ANY DAMAGES BASED ON STRICT OR ABSOLUTE TORT LIABILITY OR LESSOR'S NEGLIGENCE; PROVIDED, HOWEVER, THAT NOTHING IN THIS MASTER AGREEMENT SHALL DEPRIVE LESSEE OF ANY RIGHTS IT MAY HAVE AGAINST ANY PERSON OTHER THAN LESSOR. LESSOR AND LESSEE AGREE THAT THE LEASES SHALL BE GOVERNED BY THE EXPRESS PROVISIONS OF THIS MASTER AGREEMENT AND THE OTHER FUNDAMENTAL AGREEMENTS AND NOT BY THE CONFLICTING PROVISIONS OF ANY OTHERWISE APPLICABLE LAW. ACCORDINGLY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, LESSEE WAIVES ANY RIGHTS AND REMEDIES CONFERRED UPON A LESSEE BY STATUTE OR OTHERWISE, IN EITHER CASE THAT ARE INCONSISTENT WITH OR THAT WOULD LIMIT OR MODIFY LESSOR'S RIGHTS SET FORTH IN THIS MASTER AGREEMENT.

21.LESSEE WARRANTIES. Lessee represents, warrants and covenants to Lessor with respect to each Lease that: (a) Lessee has the power and authority to enter into each of the Fundamental Agreements; (b) all Fundamental Agreements are legal, valid and binding obligations of Lessee, enforceable against Lessee in accordance with their terms and do not violate or create a default under any instrument or agreement binding on Lessee; (c) there are no pending or threatened actions or proceedings before any court or administrative agency that could have a material adverse effect on Lessee or any Fundamental Agreement, unless such actions have been disclosed to Lessor and consented to in writing by Lessor; (d) Lessee shall comply in all material respects with all laws and regulations the violation of which could have a material adverse effect upon the Equipment or Lessee's performance of its obligations under any Fundamental Agreement; (e) each Fundamental Agreement shall be effective against all creditors of Lessee under applicable law, including fraudulent conveyance and bulk transfer laws, and shall raise no presumption of fraud; (f) all financial statements, certificates or summaries relating to Lessee's financial condition, fiscal budget or the assessment and collection of taxes and other related information furnished by Lessee shall be prepared in accordance with generally accepted accounting principles in the United States in effect at that time and shall fairly present Lessee's financial position as of the dates given on such statements; (g) since the date of the most recent annual financial statement, there has been no material adverse change in the financial condition of, or the level of assessment or collection of taxes by, the Lessee; (h) the Equipment, subject to any Lease, is essential to the immediate performance of a governmental or proprietary function by Lessee within the scope of its authority and will be used during the Term of such Lease only by Lessee and only to perform such function; (i) Lessee intends to use the Equipment for the entire Term of such Lease and all Equipment will be used for business purposes only and not for personal, family or household purposes; (j) Lessee has complied fully with all applicable law governing open meetings, public bidding and appropriations required in connection with this Lease and the acquisition of the Equipment; (k) there has been no material change in the budget for Lessee's current Fiscal Period since its adoption; (l) Lessee's obligations to pay Rent and any other amounts due under this Lease constitute a current expense and not a debt of Lessee under applicable state law; (m) no provision of this Lease constitutes a pledge of the tax or general revenues of Lessee; (n) Lessee does not export, re-export, or transfer any Equipment, Software, system software or source code or any direct product thereof to a prohibited destination, or to nationals of proscribed countries wherever located, without prior authorization from the United States government and other applicable governments; (o) Lessee does not use any Equipment, Software or system software or technology, technical data, or technical assistance related thereto or the products thereof in the design, development, or production of nuclear, missile, chemical, or biological weapons or transfer the same to a prohibited destination, or to nationals of proscribed countries wherever located, without prior authorization from the United States and other applicable governments; and (p) Lessee is not an entity designated by the United States government or any other applicable government with which transacting business without the prior consent of such government is prohibited.

22. DEFAULT. Any of the following shall constitute a default by Lessee (a "Lessee Default") under this Master Agreement and all Leases: (a) Lessee fails to pay any Rent payment or any other amount payable to Lessor under this Master Agreement or any Schedule within 10 days after its due date; or (b) Lessee defaults on or breaches any of the other terms and conditions of any Material Agreement, and fails to cure such breach within 10 days after written notice thereof from Lessor; or (c) any representation or warranty made by Lessee in any Material Agreement proves to be incorrect in any material respect when made or reaffirmed; or (d) any change occurs in relation to Lessee's financial condition that, in Lessor's opinion, would have a material adverse effect on Lessee's ability to perform its obligations under this Master Agreement or under any Schedule or (e) Lessee becomes insolvent or fails generally to pay its debts as they become due; or (f) a proceeding under any bankruptcy, reorganization, arrangement of debt, insolvency or receivership law is filed by or against Lessee (and, if such is proceeding is involuntary, it is not dismissed within 60 days after the thereof) or Lessee takes any action to authorize any of the foregoing matters; (g) any Equipment is levied against, seized or attached; or (h) any letter of credit or guaranty issued in support of a Lease is revoked, breached, canceled or terminated (unless consented to in advance by Lessor).

23. REMEDIES. If a Lessee Default occurs, Lessor may, in its sole discretion, exercise one or more of the following remedies: (a) declare all amounts due and to become due during Lessee's current fiscal year under any or all Leases to be immediately due and payable; or (b) terminate this Master Agreement or any Lease(s); or (c) take possession of, or render unusable, any Equipment wherever the Equipment may be located, without demand or notice and without any court order or other

process of law in accordance with Lessee's reasonable security procedures, and no such action shall constitute a termination of any Lease; or (d) require Lessee to deliver the Equipment to a location specified by Lessor; or (e) declare the Stipulated Loss Value for any or all Equipment to be due and payable as liquidated damages for loss of a bargain and not as a penalty and in lieu of any further Rent payments under the applicable Lease or Leases; or (f) proceed by court action to enforce performance by Lessee of any Lease and/or to recover all damages and expenses incurred by Lessor by reason of any Lessee Default; or (g) terminate any other agreement that Lessor may have with Lessee; or (h) exercise any other right or remedy available to Lessor at law or in equity. Also, Lessee shall pay Lessor (i) all costs and expenses that Lessor may incur to maintain, safeguard or preserve the Equipment, and other expenses incurred by Lessor in enforcing any of the terms, conditions or provisions of this Master Agreement (including reasonable legal fees and collection agency costs) and (ii) all costs incurred by Lessor in exercising any of its remedies hereunder (including reasonable legal fees). Upon repossession or surrender of any Equipment, Lessor will lease, sell or otherwise dispose of the Equipment in a commercially reasonable manner, with or without notice and at public or private sale, and apply the net proceeds thereof to the amounts owed to Lessor under this Master Agreement; provided, however, that Lessee will remain liable to Lessor for any deficiency that remains after any sale or lease of such Equipment. Any proceeds of any sale or lease of such Equipment in excess of the amounts owed to Lessor under this Master Agreement will be retained by Lessor. Lessee agrees that with respect to any notice of a sale required by law to be given, 10 days' notice will constitute reasonable notice. With respect to any exercise by Lessor of its right to recover and/or dispose of any Equipment or other Collateral securing Lessee's obligations under any Schedule, Lessee acknowledges and agrees as follows: (i) Lessor shall have no obligation, subject to the requirements of commercial reasonableness, to clean-up or otherwise prepare the Equipment or any other Collateral for disposition, (ii) Lessor may comply with any applicable state or federal law requirements in connection with any disposition of the Equipment or other Collateral, and any actions taken in connection therewith shall not be deemed to have adversely affected the commercial reasonableness of any such disposition, and (iii) Lessor may convey the Equipment and any other Collateral on an "AS IS, WHERE IS" basis, and without limiting the generality of the foregoing, may specifically exclude or disclaim any and all warranties, including any warranty of title or the like with respect to the disposition of the Equipment or other Collateral, and no such conveyance or such exclusion or such disclaimer of any warranty shall be deemed to have adversely affected the commercial reasonableness of any such disposition. These remedies are cumulative of every other right or remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise, and may be enforced concurrently therewith or from time to time.

24. PERFORMANCE OF LESSEE'S OBLIGATIONS. If Lessee fails to perform any of its obligations hereunder, Lessor may perform any act or make any payment that Lessor deems reasonably necessary for the maintenance and preservation of the Equipment and Lessor's interests therein; provided, however, that the performance of any act or payment by Lessor shall not be deemed a waiver of, or release Lessee from, the obligation at issue. All sums so paid by Lessor, together with expenses (including legal fees and costs) incurred by Lessor in connection therewith, shall be paid to Lessor by Lessee immediately upon demand.

25. PURCHASE OPTIONS. Lessee may elect, by delivering to Lessor at least 30 days' prior written notice, to purchase on any Rent payment date not less than all Units of Equipment then subject to the Lease (other than items of Software that may not be sold by Lessor under the terms of any applicable License Agreement) for an amount equal to the sum of the Rent then due, all other amounts due under the Lease and the Concluding Payment for such Equipment as of the designated Rent payment date; provided no Lessee Default shall have occurred and be continuing or no event has occurred which with notice or lapse of time could constitute a Lessee Default. In the event of such an election, Lessee shall pay such amount to Lessor, in immediately available funds, on or before the designated Rent payment date. If Lessee shall have elected to purchase the Equipment, shall have so paid the purchase price and shall have fulfilled the terms and conditions of this Master Agreement and the related Schedule, then (1) the Lease with respect to such Equipment shall terminate on the designated Rent payment date and, except as provided in Section 28, Lessee shall be relieved of all of its obligations in favor of Lessor with respect to such Equipment, and (2) Lessor shall transfer all of its interest in such Equipment to Lessee "AS IS, WHERE IS," without any warranty, express or implied, from Lessor, other than the absence of any liens or claims by or through Lessor.

26. ASSIGNMENT. Lessor shall have the unqualified right to sell, assign, grant a security interest in or otherwise convey any part of its interest in this Master Agreement, any Lease or any Equipment, in whole or in part, without prior notice to or the consent of Lessee. If any Lease is sold, assigned, or otherwise conveyed, Lessee agrees that Lessor's purchaser, assignee or transferee, as the case may be ("Assignee") shall (a) have the same rights, powers and privileges that Lessor has under the applicable Lease, (b) have the right to receive from Lessee all amounts due under the applicable Lease; and (c) not be required to perform any obligations of Lessor, other than those that are expressly assumed in writing by such Assignee. Lessee agrees to execute such acknowledgements to such assignment as may be reasonably requested by Lessor or the Assignee. Lessee further agrees that, in any action brought by such Assignee against Lessee to enforce Lessor's rights hereunder, Lessee will not assert against such Assignee any set-off, defense or counterclaim that Lessee may have against Lessor or any other person. Unless otherwise specified by Lessor and the Assignee, Lessee shall continue to pay all amounts due under the applicable Lease to Lessor; provided, however, that upon notification from Lessor and the Assignee, Lessee covenants to pay all amounts due under the applicable Lease to such Assignee when due and as directed in such notice. Lessee further agrees that any Assignee may further sell, assign, grant a security interest in or otherwise convey its rights and interests under the applicable Lease with the same force and effect as the assignment described herein. Lessee may not assign, transfer, sell, sublease, pledge or otherwise dispose of this Master Agreement, any Lease, any Equipment or any interest therein. Lessee shall acknowledge each such assignment in writing if so requested and keep a complete and accurate record of all such assignments in a manner that complies with Section 149 of the Code, and regulations promulgated thereunder.

27. FURTHER ASSURANCES. Lessee agrees to promptly execute and deliver to Lessor such further documents and take such further action as Lessor may require in order to more effectively carry out the intent and purpose of this Master Agreement and any Schedule. Without limiting the generality of the foregoing, Lessee agrees (a) to furnish to Lessor from time to time, its certified financial statements, officer's certificates and appropriate resolutions, opinions of counsel and such other information and documents as Lessor may reasonably request, and (b) to execute and timely deliver to Lessor such documents that Lessor deems necessary to perfect or protect Lessor's security interest in the Collateral or to evidence Lessor's interest in the Equipment. It is also agreed that Lessor or Lessor's agent may file as a financing statement, any lease document (or copy thereof, where permitted by law) or other financing statement that Lessor deems appropriate to perfect or protect Lessor's security interest in the Collateral or to evidence Lessor's interest in the Equipment. Upon demand, Lessee will promptly reimburse Lessor for any filing or recordation fees or expenses (including legal fees and costs) incurred by Lessor in perfecting or protecting its interests in any Collateral. Lessee hereby appoints Lessor and any agent of Lessor as Lessee's attorney-in-fact, with full power of substitution in its place and stead, in its name or in the name of Lessor to from time to time in Lessor's sole discretion take any action and to execute any instrument which Lessor may deem necessary or advisable to protect Lessor's interests hereunder. Lessee acknowledges and agrees that such appointment is coupled with an interest and is irrevocable until the expiration or termination of all Leases and financings and the satisfaction by Lessee of all of its obligations hereunder. Lessee represents and warrants that Lessee's name as set forth in the signature block below is Lessee's full and accurate legal name and that the information set forth on the first page hereof regarding its organization number, tax identification number and location is true and correct as of the date hereof. Lessee further agrees to provide Lessor advance written notice of any change in the foregoing.

28. TERM OF MASTER AGREEMENT; SURVIVAL. This Master Agreement shall commence and be effective upon the execution hereof by both parties and shall continue in effect until terminated by either party by 30 days' prior written notice to the other, provided that the effective date of the termination is after all obligations of Lessee arising hereunder and pursuant to any Schedule have been fully satisfied. Notwithstanding the foregoing, all representations, warranties and covenants made by Lessee hereunder shall survive the termination of this Master Agreement and shall remain in full force and effect. All of Lessor's rights, privileges and indemnities under this Master Agreement or any Lease, to the extent they are fairly attributable to events or conditions occurring or existing on or prior to the expiration or termination of such Lease, shall survive such expiration or termination and be enforceable by Lessor and Lessor's successors and assigns.

29. WAIVER OF JURY TRIAL. LESSEE AND LESSOR HEREBY EXPRESSLY WAIVE ANY RIGHT TO DEMAND A JURY TRIAL WITH RESPECT TO ANY ACTION OR PROCEEDING INSTITUTED BY LESSOR OR LESSEE IN CONNECTION WITH THIS MASTER AGREEMENT OR ANY FUNDAMENTAL AGREEMENT.

30. NOTICES. All notices, requests, demands, waivers and other communications required or permitted to be given under this Master Agreement or any other Fundamental Agreement shall be in writing and shall be deemed to have been received upon receipt if delivered personally or by a nationally recognized overnight courier service, or by confirmed facsimile transmission, or 3 days after deposit in the United States mail, certified, postage prepaid with return receipt requested, addressed as follows (or such other address or fax number as either party shall so notify the other):

If to Lessor:

Hewlett-Packard Company
Attn:
Fax

If to Lessee:

_____
_____
_____
Attn: _____ ("Authorized Lessee Representative")
Fax:

31. MISCELLANEOUS

(a) Governing Law. THIS MASTER AGREEMENT AND EACH LEASE SHALL BE GOVERNED BY THE INTERNAL LAWS (AS OPPOSED TO CONFLICTS OF LAW PROVISIONS) OF THE STATE OF EQUIPMENT LOCATION.

(b) Credit Review. Lessee consents to a reasonable credit review by Lessor for each Lease.

(c) Captions and References. The captions contained in this Master Agreement and any Schedule are for convenience only and shall not affect the interpretation of this Master Agreement or any Lease. All references in this Master Agreement to Sections and Exhibits refer to Sections hereof and Exhibits hereto unless otherwise indicated.

(d) Entire Agreement; Amendments. This Master Agreement and all other Fundamental Agreements executed by both Lessor and Lessee constitute the entire agreement between Lessor and Lessee relating to the leasing of the Equipment, and supersede all prior agreements relating thereto, whether written or oral, and may not be amended or modified except in a writing signed by the parties hereto.

(e) No Waiver. Any failure of Lessor to require strict performance by Lessee, or any written waiver by Lessor of any provision hereof, shall not constitute consent or waiver of any other breach of the same or any other provision hereof.

(f) Lessor Affiliates. Lessee understands and agrees that Hewlett-Packard Financial Services Company or any affiliate or subsidiary thereof may, as lessor, execute Schedules under this Master Agreement, in which event the terms and conditions of the applicable Schedule and this Master Agreement as it relates to the lessor under such Schedule shall be binding upon and shall inure to the benefit of such entity executing such Schedule as lessor, as well as any successors or assigns of such entity. Lessee agrees that Lessor may disclose any information provided by Lessee to Lessor or created by Lessor in the course of administering the Material Agreements to any parent or affiliate of Lessor.

(g) Invalidity. If any provision of this Master Agreement or any Schedule shall be prohibited by or invalid under law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Master Agreement or such Schedule.

(h) Counterparts. This Master Agreement may be executed in counterparts, which collectively shall constitute one document.

(i) Lessor Reliance. Lessor may act in reliance upon any instruction, instrument or signature reasonably believed by Lessor in good faith to be genuine. Lessor may assume that any employee of Lessee who executes any document or gives any written notice, request or instruction has the authority to do so.

32. DEFINITIONS. All capitalized terms used in this Master Agreement have the meanings set forth below or in the Sections of this Master Agreement referred to below:

"Acceptance Certificate" means an Acceptance Certificate in substantially the form of Exhibit B, executed by Lessee and delivered to Lessor in accordance with Section 3.

"Acceptance Date" means, as to any Lease, the date Lessee shall have accepted the Equipment subject to such Lease in accordance with Section 3.

"Assignee" means any assignee of all or any portion of Lessor's interest in this Master Agreement, any Schedule or any Equipment, whether such assignee received the assignment of such interest from Lessor or a previous assignee of such interest.

"Authorized Lessee Representative" has the meaning specified in Section 30.

"Casualty Loss" means, with respect to any Equipment, the condemnation, taking, loss, destruction, theft or damage beyond repair of such Equipment.

"Casualty Value" means, as to any Equipment, an amount determined as of the date of the Casualty Loss or Lessee Default in question pursuant to a "Table of Casualty Values" attached to the applicable Schedule or, if no "Table of Casualty Values" is attached to the applicable Schedule, an amount equal to the present value as of the date of the Casualty Loss or Lessee Default in question (discounted at 5% per annum, compounded monthly) of all Rent payments payable after such date

"Claims" means all claims, actions, suits, proceedings, costs, expenses (including, without limitation, court costs, witness fees and attorneys' fees), damages, obligations, judgments, orders, penalties, fines, injuries, liabilities and losses, including, without limitation, actions based on Lessor's strict liability in tort.

"Code" means the Internal Revenue Code of 1986, as amended.

"Collateral" has the meaning specified in Section 13.

"Concluding Payments" means the list of concluding payments on the attachment to the applicable Schedule.

"Daily Rent" means, as to any Lease, an amount equal to the per diem Rent payable under the applicable Schedule (calculated on the basis of a 360 day year and 30 day months).

"Equipment" has the meaning specified in Section 1.

"Equipment Location" means, as to any Equipment, the address at which such Equipment is located from time to time, as originally specified in the applicable Schedule and as subsequently specified in a notice delivered to Lessor pursuant to Section 12, if applicable.

"Fair Market Value" means the total price that would be paid for any specified Equipment in an arm's length transaction between an informed and willing buyer (other than a used equipment dealer) under no compulsion to buy and an informed and willing seller under no compulsion to sell. Such total price shall not be reduced by the costs of removing such Equipment from its current location or moving it to a new location.

"Final Invoice Amount" has the meaning set forth in Section 2(c).

"First Payment Date" means, as to any Lease, the date the first Rent payment with respect to such Lease is due, as determined pursuant to the terms of the applicable Schedule.

"Fiscal Period" shall mean the fiscal year of Lessee, as it may be more particularly described in a Schedule.

"Fundamental Agreements" means, collectively, this Master Agreement, each Schedule and Acceptance Certificate and all other related instruments and documents.

"Hardware" means items of tangible equipment and other property.

"Lease" has the meaning specified in Section 2(a).

"Lessee" has the meaning specified in the preamble hereof.

"Lessee Default" has the meaning specified in Section 22.

"Lessor" has the meaning specified in the preamble hereof.

"License Agreement" means any license agreement or other document granting the purchaser the right to use Software or any technical information, confidential business information or other documentation relating to Hardware or Software, as amended, modified or supplemented by any other agreement between the licensor and Lessor.

"Master Agreement" has the meaning specified in the preamble hereof.

"Material Agreements" means, collectively, all Fundamental Agreements, all other material agreements by and between Lessor and Lessee, and any application for credit, financial statement, or financial data required to be provided by Lessee in connection with any Lease.

"Mobile PC Equipment" has the meaning specified in Section 12 hereof.

"Non-Appropriation" has the meaning specified in Section 7.

"Optional Additions" has the meaning specified in Section 11.

"PC Equipment" means, collectively, personal computers (e.g., workstations, desktops and notebooks) and related items of peripheral equipment (e.g., monitors, printers and docking stations).

"Purchase Documents" means, as to any Equipment, any purchase order, contract, bill of sale, License Agreement, invoice and/or other documents that Lessee has, at any time, approved, agreed to be bound by or entered into with any Supplier of such Equipment relating to the purchase, ownership, use or warranty of such Equipment.

"Rent" has the meaning specified in Section 4.

"Schedule" means, unless the context shall otherwise require a Schedule executed by Lessor and Lessee pursuant to Section 2(a).

"Seller" means, as to any Equipment, the seller of such Equipment as specified in the applicable Schedule.

"Software" means copies of computer software programs owned or licensed by Lessor, and any disks, CDs, or other media on which such programs are stored or written.

"State" means any of the states of the United States, its territories and possessions.

"Stipulated Loss Value" means, as to any Equipment, an amount equal to the sum of (a) all Rent (including the Daily Rent from the Rent payment date immediately preceding the date of the Casualty Loss or Lessee Default to the date of the Casualty Loss or Lessee Default) and other amounts due and owing with respect to such Equipment as of the date of payment of such amount, plus (b) the Casualty Value of such Equipment.

"Substitute Equipment" means, as to any item of Hardware or Software subject to a Lease, a substantially equivalent or better item of Hardware or Software having equal or greater capabilities and equal or greater Fair Market Value manufactured or licensed by the same manufacturer or licensor as such item of Hardware or Software subject to a Lease. The determination of whether any item of Equipment is substantially equivalent or better than an item of Equipment subject to a Lease shall be based on all relevant facts and circumstances, but shall minimally require, in the case of a computer, that each of processor, hard-drive, random access memory and CD ROM drive, if applicable, be equivalent or better.

"Supplier" means as to any Equipment, the Seller and the manufacturer or licensor of such Equipment collectively, or where the context requires, any of them. In certain Leases, the Supplier may be Lessor.

"System Software" means an item of Software that is pre-loaded on an item of Hardware purchased by Lessor for lease hereunder for which the relevant Purchase Documents specify no purchase price separate from the aggregate purchase price specified for such items of Hardware and Software.

"Taxes" means all license and registration fees and all taxes (local, state and federal), fees, levies, imposts, duties, assessments, charges and withholding of any nature whatsoever, however designated (including, without limitation, any value added, transfer, sales, use, gross receipts, business, occupation, excise, personal property, real property, stamp or other taxes) other than taxes measured by Lessor's income.

"Term" means the term thereof as specified in the related Schedule.

"Total Cost" means as to any Lease, the total acquisition cost to Lessor of the Equipment subject to such Lease as set forth in the applicable Purchase Documents, including related delivery, installation, taxes and other charges which Lessor has agreed to pay and treat as a portion of such acquisition cost, if any.

"UCC" means the Uniform Commercial Code as enacted and in effect in any applicable jurisdiction.

"Unit of Equipment" means, as to the Equipment leased pursuant to any Schedule (a) each individual item of PC Equipment leased pursuant to such Schedule, and (b) all Equipment taken as a whole leased pursuant to such Schedule other than PC Equipment taken as a whole.

IN WITNESS WHEREOF, LESSEE AND LESSOR HAVE EXECUTED THIS MASTER AGREEMENT ON THE DATES SPECIFIED BELOW.

LESSEE:	**LESSOR:** **HEWLETT-PACKARD COMPANY**
_____	
By:_____	**By:**_____
_____ **Name and Title**	_____ **Name and Title**
_____ **Date**	_____ **Date**

Exhibit A to Master Agreement

Master Agreement Number _____
Schedule Number _____

COUNTERPART NO. _____ OF _____. TO THE EXTENT THAT THIS SCHEDULE CONSTITUTES CHATTEL PAPER (AS DEFINED ON THE UCC), NO SECURITY INTEREST IN THIS SCHEDULE MAY BE CREATED THROUGH THE TRANSFER OR POSSESSION OF ANY COUNTERPART OTHER THAN COUNTERPART NO. 1.

STATE AND LOCAL GOVERNMENT MASTER LEASE PURCHASE AGREEMENT
SCHEDULE

Hewlett-Packard Company ("Lessor") and_____, an agency, department or political subdivision of the State of _____ ("Lessee") are parties to the State and Local Government Master Lease Purchase Agreement identified by the Master Agreement Number specified above (the "Master Agreement"). This Schedule (which shall be identified by the Schedule Number specified above) and the Master Agreement together comprise a separate Lease between the parties. The terms and conditions of the Master Agreement are hereby incorporated by reference into this Schedule. All capitalized terms used in this Schedule without definition have the meanings ascribed to them in the Master Agreement.

1. **LEASE.**
   A. Description of Items of Leased Equipment **Total Cost**

   B. Term: ____ Months.

2. **Rent.** See Attachment A. Annual Rate of Interest _____

3. **LATEST COMMENCEMENT DATE**: _____. Lessor's obligation to purchase and lease the Equipment is subject to the Acceptance Date being on or before the Latest Commencement Date.

4. **EQUIPMENT LOCATION:** _____ .

5. **SELLER:** _____ .

6. **APPROPRIATIONS:** Monies for all Rent and other payments due under the Lease for the Fiscal Period ending _____ are available from Lessee's appropriated funds for such Fiscal Period and that appropriations and/or other funds have been encumbered or designated for the payment of all Rent and other payments that shall become due under the Lease in such Fiscal Period.

7. **ADDITIONAL PROVISIONS: _____**

8. **FISCAL PERIOD: ___[Annual]_____**

LESSOR AGREES TO LEASE TO LESSEE AND LESSEE AGREES TO LEASE FROM LESSOR THE EQUIPMENT DESCRIBED IN SECTION 1.A ABOVE. SUCH LEASE WILL BE GOVERNED BY THE MASTER AGREEMENT AND THIS SCHEDULE, INCLUDING THE IMPORTANT ADDITIONAL TERMS AND CONDITIONS SET FORTH ABOVE. IN THE EVENT OF ANY CONFLICT BETWEEN THE TERMS OF THIS SCHEDULE AND THE MASTER AGREEMENT, THE TERMS OF THIS SCHEDULE SHALL GOVERN. LESSEE HEREBY REPRESENTS AND WARRANTS THAT ON AND AS OF THE DATE HEREOF EACH OF THE REPRESENTATIONS AND WARRANTIES MADE BY LESSEE IN THE MASTER AGREEMENT ARE TRUE, CORRECT AND COMPLETE.

LESSEE:	**LESSOR:**
_____	HEWLETT-PACKARD COMPANY
By:_____	**By:**_____
_____	_____
Name and Title	**Name and Title**
_____	_____
Date	**Date**

Master Agreement Number _____
Schedule Number _____

ATTACHMENT A

TO

SCHEDULE TO STATE AND LOCAL GOVERNMENT MASTER LEASE PURCHASE AGREEMENT

The first payment of Rent will be due [__ days after][on] the Acceptance Date and all payments will be due [monthly][quarterly][semi-annually][annually] thereafter.

Rent Payment No	Rent	Interest	Principal	Concluding Payments

PLEASE INITIAL HERE: _____
Lessee

Exhibit B to Master Agreement

Master Agreement Number _____
Schedule Number _____

STATE AND LOCAL GOVERNMENT MASTER LEASE PURCHASE AGREEMENT
ACCEPTANCE CERTIFICATE

Hewlett-Packard Financial Services Company[1] ("Lessor") and_____, an agency, department or political subdivision of the State of _____ ("Lessee") are parties to the State and Local Government Master Lease Purchase Agreement (the "Master Agreement") and Schedule under such Master Agreement (the "Schedule") identified by the Master Agreement Number and Schedule Number, respectively, specified above. The Master Agreement and Schedule together comprise a separate Lease, that is being accepted and commenced pursuant to this Acceptance Certificate. All capitalized terms used in this Acceptance Certificate without definition have the meanings ascribed to them in the Master Agreement.

1. LEASE ACCEPTANCE. Lessee hereby acknowledges that the Equipment described in Section 1 of the Schedule, or if different, the Equipment described in the attached invoice or other attachment hereto, has been delivered to the Equipment Location specified below, inspected by Lessee and found to be in good operating order and condition, and has been unconditionally and irrevocably accepted by Lessee under the Lease evidenced by the Master Agreement and the Schedule as of the Acceptance Date set forth below. Lessee authorizes Lessor to reduce the Rent payments on the Schedule to reflect the Final Invoice Amount set forth on the attached invoice(s) if such amount is different than the Total Cost on the Schedule.

2. LESSEE ACKNOWLEDGEMENTS. Lessee hereby agrees to faithfully perform all of its obligations under the Master Agreement and the Schedule and reaffirms, as of the date hereof, its representations and warranties as set forth in the Master Agreement. Lessee hereby acknowledges its agreement to pay Lessor Rent payments, as set forth in the Schedule, plus any applicable taxes, together with all other costs, expenses and charges whatsoever which Lessee is required to pay pursuant to the Master Agreement and the Schedule, in each instance at the times, in the manner and under the terms and conditions set forth in the Master Agreement and the Schedule, respectively.

3. EQUIPMENT LOCATION. The Equipment has been installed and is located at the following Equipment Location:

_____

_____ .

4. REPRESENTATIONS AND WARRANTIES. Lessee hereby represents and warrants that on and as of the date hereof each of the representations and warranties made by Lessee in the Master Agreement are true, correct and complete.

[LESSEE]

By:_____

_____
Name and Title

Acceptance Date:_____

HP Appendix C—Master Operating Lease Agreement

Proposal Reference: Appendix D—NASPO Standard Terms and Conditions, section Financing Terms and Condition

Master Agreement Number _____

Lessee's Organization Number __
Lessee's Tax Identification Number _____
Lessee's UCC Section 9-307 Location _____

STATE AND LOCAL GOVERNMENT MASTER OPERATING LEASE AGREEMENT

This State and Local Government Master Operating Lease Agreement (together with Exhibits A and B attached hereto and hereby made a part hereof, (this "Master Agreement"), dated as of _____, is entered into by and between Hewlett-Packard Company, a Delaware corporation ("Lessor"), and _____, _____, an agency, department or political subdivision of the State of _____ ("Lessee"). Capitalized terms used in this Master Agreement without definition have the meanings ascribed to them in Section 31.

1. PURPOSE OF MASTER AGREEMENT. The purpose of this Master Agreement is to set forth the general terms and conditions upon which Lessor shall lease to Lessee, and Lessee shall lease from Lessor, items of Hardware, Software or both (such Hardware and Software being collectively referred to as "Equipment").

2. COMMENCEMENT PROCEDURES. Subject to the other terms and conditions contained in this Master Agreement and the applicable Schedule, Lessee shall enter into individual Leases (hereinafter defined) with Lessor as follows:

(a) Execution of Schedule. Lessor and Lessee mutually agree to enter into a Lease by executing a Schedule in the form of Exhibit A with such changes as Lessor and Lessee shall have agreed to as conclusively evidenced by their execution thereof. Each such Schedule shall specifically identify (by serial number or other identifying characteristics) the items of Equipment to be leased under such Schedule (other than items of System Software, which shall be deemed to be items of Software leased under the Schedule pursuant to which the related items of Hardware are leased). Each Schedule, when executed by both Lessee and Lessor, together with this Master Agreement, shall constitute a separate and distinct lease ("Lease"), enforceable according to its terms. In the event of any conflict between the terms of this Master Agreement and such Schedule, the provisions of the Schedule shall govern.

(b) Acceptance; Initial Term of Leases. Lessee shall accept the Equipment subject to a Lease in accordance with Section 3. The Initial Term of each Lease shall begin on the Acceptance Date of the Equipment subject to such Lease and shall continue for the period described in the applicable Schedule unless a Nonappropriation shall have occurred.

(c) Adjustments to Schedule. Lessee acknowledges that the Total Cost of Equipment and the related Rent payments set forth in any Schedule may be estimates, and if the final invoice from the Seller attached to the related Acceptance Certificate(s) specifies a Total Cost that is less than the estimated Total Cost set forth in the Schedule, Lessee hereby authorizes Lessor to reduce the applicable Total Cost and Rent payment on the Schedule by up to ten percent (10%) to reflect such final invoice amount (the "Final Invoice Amount"). All references in this Master Agreement and any Schedule to Total Cost and Rent shall mean the amounts thereof specified in the applicable Schedule, as adjusted pursuant to this paragraph.

(d) Payment by Lessor. Within 30 days after Lessee's delivery to Lessor of a properly completed and executed Acceptance Certificate and all other documentation necessary to establish Lessee's acceptance of such Equipment under the related Lease and Lessor's acceptance of such Acceptance Certificate, Lessor shall pay for the Equipment. Lessor shall not accept the Acceptance Certificate until it has received from Lessee (1) evidence of insurance with respect to the Equipment in compliance with Section 13 hereof, (2) an opinion of Lessee's counsel, if required by Lessor, in form and substance reasonably satisfactory to Lessor and (3) any other documents or items reasonably required by Lessor. Notwithstanding the foregoing, Lessor shall not be obligated to pay for the Equipment if a Lessee Default has occurred or an event has occurred and is continuing that with the passage of time or provision of notice would constitute a Lessee Default.

3. ACCEPTANCE OF EQUIPMENT. (a) Inspection of Equipment. Lessee agrees to inspect all Equipment as soon as reasonably practicable after the delivery thereof to Lessee.

(b) Acceptance Certificate. Upon the satisfactory inspection of the Equipment by Lessee, or if acceptance requirements for such Equipment are specified in the applicable Purchase Documents, as soon as such requirements are met, Lessee shall unconditionally and irrevocably accept the Equipment by executing and delivering to Lessor a properly completed Acceptance Certificate in substantially the form of Exhibit B.

4. LESSEE'S END-OF-LEASE-TERM OPTIONS; AUTOMATIC EXTENSION. Lessee shall have the following options in respect of each Lease at the end of each of the Initial Term, any Renewal Term and any optional extension of the Initial Term or any Renewal Term:

a. Purchase Option. Lessee may elect, by delivering to Lessor an End-of-Term Notice at least 90 days prior to the expiration of the Initial Term, any Renewal Term or any optional extension of the Initial Term or any Renewal Term, to purchase any or all Units of Equipment then subject to such Lease (other than items of Software that may not be sold by Lessor under the terms of any applicable License Agreement) for an amount equal to the Fair Market Value of such Units of Equipment as of the end of the Then Applicable Term, provided no Lessee Default shall have occurred and be continuing. In the event of such an election, Lessee shall pay such amount to Lessor, in immediately available funds, on or before the last day of the Then Applicable Term. If Lessee shall have so elected to purchase any of the Units of Equipment, shall have so paid the applicable purchase price and shall have fulfilled the terms and conditions of this Master Agreement, then on the last day of the Then Applicable Term (1) the Lease with respect to such Units of Equipment shall terminate and, except as provided in Section 26, Lessee shall be relieved of all of its obligations in favor of Lessor with respect to such Units of Equipment, and (2) Lessor shall transfer all of its interest in such Units of Equipment to Lessee "AS IS, WHERE IS," without any warranty, express or implied, from Lessor, other than the absence of any liens or claims by or through Lessor. In the event Lessor and Lessee are unable to agree on the Fair Market Value of any Units of Equipment, Lessor shall, at Lessee's expense, select an independent appraiser to conclusively determine such amount.

b. Renewal Option. Lessee may elect, by delivering to Lessor an End-of-Term Notice at least 90 days prior to the expiration of the Initial Term, any Renewal Term, or any optional extension of the Initial Term or any Renewal Term, to renew the Lease with respect to any or all Units of Equipment then subject to such Lease (other than items of Software that may not be re-released by Lessor under the terms of any applicable License Agreement) for an amount equal to the Fair Rental Value of such Units of Equipment as of the end of the Then Applicable Term. In the event of such an election, Lessee shall enter into a mutually agreeable renewal agreement with Lessor ("Renewal Agreement") on or before the last day of the Then Applicable Term confirming the Units of Equipment as to which the Lease is to be renewed, the period for which the Lease is to be renewed (the "Renewal Term"), and the amount of Rent and the times at which such Rent is to be payable during the Renewal

Term. In the event Lessor and Lessee are unable to agree on the Fair Rental Value of any Units of Equipment, Lessor shall, at Lessee's expense, select an independent appraiser to conclusively determine such amount.

c. Return. Lessee may elect, by delivering to Lessor an End-of-Term Notice at least 90 days prior to the expiration of the Initial Term, any Renewal Term or any optional extension of the Initial Term or any Renewal Term, to return any or all of the Units of Equipment then subject to such Lease in accordance with Section 10 of this Master Agreement.

d. Optional Extension. Lessee may elect, by omitting to deliver to Lessor an End-of-Term Notice at least 90 days prior to the expiration of the Initial Term or any Renewal Term, to extend the Initial Term or such Renewal Term, as the case may be. In that event, the Initial Term or such Renewal Term shall, without any additional notice or documentation, be automatically extended for successive calendar months with respect to all items of Equipment then subject to such Lease through the end of the calendar month falling at least 90 days after the date Lessee shall have delivered to Lessor an End-of-Term Notice with respect to such Lease. For each calendar month that the Then Applicable Term of such Lease is so extended, Lessee shall pay to Lessor Rent in an amount equal to the monthly Rent payment in effect immediately prior to such extension (or the appropriate pro rata portion of the Rent payment then in effect in the case of Rent payable other than on a monthly basis), and all other provisions of this Master Agreement and the applicable Schedule shall continue to apply.

If Lessee shall have delivered to Lessor an End-of-Term Notice with respect to a Lease, but shall have subsequently failed to comply with its obligations arising from its elections specified therein (*e.g.*, Lessee shall have failed, on or before the last day of the Then Applicable Term (1) to pay Lessor the purchase price for Equipment to be purchased in accordance with Section 4(a) above, (2) to execute a Renewal Agreement with respect to Equipment as to which the Lease is to be renewed in accordance with Section 4(b) above, or (3) to return to Lessor Equipment to be returned in accordance with Section 4(c) above), then the Then Applicable Term of such Lease shall, without any additional notice or documentation, be automatically extended for successive calendar months with respect to all items of Equipment as to which Lessee shall have so failed to comply with its obligations through the end of the calendar month in which Lessee shall have complied with such obligations. For each calendar month that the Then Applicable Term of any Lease is so extended, Lessee shall pay to Lessor Rent in an amount equal to the monthly Rent payment in effect immediately prior to such extension (or the appropriate pro rata portion of the Rent payment then in effect in the case of Rent payable other than on a monthly basis), and all other provisions of this Master Agreement and the applicable Schedule shall continue to apply. Notwithstanding any of the provisions of this Section 4 to the contrary, if any Lessee Default shall have occurred and be continuing at any time during the last 90 days of the Then Applicable Term of any Lease, Lessor may cancel any Renewal Term or optional or other automatic extension of the Then Applicable Term immediately upon written notice to Lessee.

5. RENT; LATE CHARGES. As rent ("Rent") for the Equipment under any Lease, Lessee agrees to pay the amounts specified in the applicable Schedule on the due dates specified in the applicable Schedule. Lessee agrees to pay Lessor interest on any Rent payment or other amount due hereunder that is not paid within 10 days of its due date, at the rate of 1-1/2% per month (or such lesser rate as is the maximum rate allowable under applicable law). Lessee will make provision for such payments in budgets submitted to its governing body for the purpose of obtaining funding for the payments.

6. LEASES NON-CANCELABLE; NET LEASES; WAIVER OF DEFENSES TO PAYMENT. IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT EACH LEASE HEREUNDER SHALL BE NON-CANCELABLE (EXCEPT AS SET FORTH IN SECTION 7 HEREOF), AND THAT EACH LEASE HEREUNDER IS A NET LEASE (SO THAT AMONG OTHER THINGS LESSEE SHALL PAY IN ADDITION TO THE RENT, TAXES, INSURANCE AND MAINTENANCE CHARGES RELATED TO THE EQUPMENT). LESSEE AGREES THAT IT HAS AN ABSOLUTE AND UNCONDITIONAL OBLIGATION TO PAY ALL RENT AND OTHER AMOUNTS WHEN DUE. LESSEE HEREBY WAIVES ANY RECOUPMENT, CROSS-CLAIM, COUNTERCLAIM OR ANY OTHER DEFENSE AT LAW OR IN EQUITY TO ANY RENT OR OTHER AMOUNT DUE WITH RESPECT TO ANY LEASE, WHETHER ANY SUCH DEFENSE ARISES OUT OF THIS MASTER AGREEMENT, ANY SCHEDULE, ANY CLAIM BY LESSEE AGAINST LESSOR, LESSOR'S ASSIGNEES OR SUPPLIER OR OTHERWISE. IF THE EQUIPMENT IS NOT PROPERLY INSTALLED, DOES NOT OPERATE OR INTEGRATE AS REPRESENTED OR WARRANTED BY SUPPLIER OR IS UNSATISFACTORY FOR ANY REASON WHATSOEVER, LESSEE WILL MAKE ANY CLAIM ON ACCOUNT OF THOSE ISSUES SOLELY AGAINST SUPPLIER AND WILL NEVERTHELESS PAY ALL SUMS DUE WITH RESPECT TO EACH LEASE.

7. NONAPPROPRIATION. Notwithstanding anything contained in this Master Agreement to the contrary, in the event that sufficient funds are not appropriated and budgeted by Lessee's governing body or are not otherwise available from other legally available sources in any fiscal period for the payment of Rent and other amounts due under any Lease, the Lease shall terminate on the last day of the fiscal period for which appropriations were received or other amounts are available to pay amounts due under the Lease without penalty or expense to Lessee of any kind whatsoever, except as to the portions of Rent payments or other amounts herein agreed upon for which funds shall have been appropriated or are otherwise available. Lessee will immediately notify the Lessor or its assignee of such occurrence. In the event of such termination, Lessee shall immediately cease all use of the Equipment, and shall, at its sole expense and risk, immediately de-install, disassemble, pack, crate, insure, and return the Equipment subject to such Lease to Lessor (all in accordance with Section 10 of this Master Agreement). Such Equipment shall be in the same condition as when received by Lessee (reasonable wear, tear and depreciation resulting from normal and proper use excepted), shall be in good operating order and maintenance as required by this Lease, shall be free and clear of any liens (except Lessor's lien) and shall comply with all applicable laws and regulations. Lessee agrees to execute and deliver to Lessor all documents reasonably requested by Lessor or evidence the transfer of legal and beneficial title to such Equipment to Lessor and to evidence the termination of Lessee's interest in such Equipment. Lessor will have all legal and equitable rights and remedies to take possession of the Equipment. At Lessor's request, Lessee shall promptly provide supplemental documentation as to such Non-Appropriation satisfactory to Lessor. Lessee's exercise of its rights pursuant to this Section 7 shall not affect the survival of any indemnity and other provisions (other than the obligation to lease the Equipment and pay amounts due under the Lease) which survive the termination of the Lease.

8. ASSIGNMENT OF PURCHASE DOCUMENTS. Lessee assigns to Lessor all of Lessee's right, title and interest in and to (a) the Equipment described in each Schedule, and (b) the Purchase Documents relating to such Equipment. Such assignment of the Purchase Documents is an assignment of rights only; nothing in this Master Agreement shall be deemed to have relieved Lessee of any obligation or liability under any of the Purchase Documents, except that, as between Lessee and Lessor, Lessor shall pay for the Equipment in accordance with Section 2(d) hereof. Lessee represents and warrants that it has reviewed and approved the Purchase Documents. In addition, if Lessor shall so request, Lessee shall deliver to Lessor a document acceptable to Lessor whereby Seller acknowledges and provides any required consent to such assignment. For the avoidance of doubt, Lessee covenants and agrees that it shall at all times during the Total Term of each Lease comply in all respects with the terms of any License Agreement relating to any Equipment leased thereunder. **IT IS ALSO SPECIFICALLY UNDERSTOOD AND AGREED THAT NEITHER SUPPLIER NOR ANY SALESPERSON OF SUPPLIER IS AN AGENT OF LESSOR, NOR ARE THEY AUTHORIZED TO WAIVE OR ALTER ANY TERMS OF THIS MASTER AGREEMENT OR ANY SCHEDULE.**

9. ASSIGNMENT OF SUPPLIER WARRANTIES. To the extent permitted, Lessor hereby assigns to Lessee, for the Total Term of any Lease, all Equipment warranties provided by any Supplier in the applicable Purchase Documents. Lessee shall have the right to take any action it deems appropriate to enforce such warranties provided such enforcement is pursued in Lessee's name and at its expense. In the event Lessee is precluded from enforcing any such warranty in its name, Lessor shall, upon Lessee's request, take reasonable steps to enforce such warranty. In such circumstances, Lessee shall, promptly upon demand, reimburse Lessor for all expenses incurred by Lessor in enforcing the Supplier warranty. Any recovery resulting from any such enforcement efforts shall be divided among Lessor and Lessee as their interests may appear.

10. EQUIPMENT RETURN REQUIREMENTS. At any time Lessee is required to return Equipment to Lessor under the terms of this Master Agreement or any Schedule, Lessee shall (a) wipe clean or permanently delete all data contained on the Equipment, including without limitation, any data contained on internal or external

drives, discs, or accompanying media, and (b) pack the Equipment to be returned to Lessor in accordance with the manufacturer's guidelines and deliver such Equipment to Lessor at any destination within the continental United States designated by Lessor. In the case of any item of Software or License Agreement subject to a Schedule, at the time of the occurrence of a Non-Appropriation or a Lessee Default, Lessee shall also be automatically deemed to have reassigned any License Agreement, and shall immediately de-install and deliver to Lessor all Software, together with the original certificate of authenticity issued by the licensor of such Software, if any All dismantling, packaging, transportation, in-transit insurance and shipping charges shall be borne by Lessee. All Equipment shall be returned to Lessor in the same condition and working order as when delivered to Lessee, reasonable wear and tear excepted, and except in the case of PC Equipment and Software, shall qualify for maintenance service by the Supplier at its then standard rates for Equipment of that age, if available. Lessee shall be responsible for, and shall reimburse Lessor promptly on demand for the cost of returning the Equipment to good working condition or, in the case of Equipment other than PC Equipment and Software, qualifying the Equipment for the Supplier's maintenance service, if available.

11. EQUIPMENT USE, MAINTENANCE, AND ADDITIONS. Lessee is solely responsible for the selection, installation, operation and maintenance of the Equipment and all costs related thereto, including shipping charges. Lessee shall at all times operate and maintain the Equipment in good working order, repair, condition and appearance, and in accordance with the manufacturer's specifications and recommendations. On reasonable prior notice to Lessee, Lessor and Lessor's agents shall have the right, during Lessee's normal business hours and subject to Lessee's reasonable, standard security procedures, to enter the premises where the Equipment is located for the purpose of inspecting the Equipment and observing its use. If Lessor shall have provided to Lessee any tags or identifying labels, Lessee shall, at its expense, affix and maintain in a prominent position on each item of Equipment such tags or labels to indicate Lessor's ownership of the Equipment. Except in the case of PC Equipment and Software, Lessee shall, at its expense, enter into and maintain and enforce at all times during the Total Term of each Lease a maintenance agreement to service and maintain the related Equipment, upon terms and with a provider reasonably acceptable to Lessor. Lessee shall make no alterations or additions to the Equipment, except those that (a) will not void any warranty made by the Supplier of the Equipment, result in the creation of any security interest, lien or encumbrance on the Equipment or impair the value or use of the Equipment either at the time made or at the end of the Term of the applicable Lease, and are readily removable without damage to the Equipment ("Optional Additions"), or (b) are required by any applicable law, regulation or order. All additions to the Equipment or repairs made to the Equipment, except Optional Additions, become a part of the Equipment and Lessor's property at the time made; Optional Additions which have not been removed in the event of the return of the Equipment shall become Lessor's property upon such return.

12. EQUIPMENT OWNERSHIP; LIENS; LOCATION. As between Lessor and Lessee, Lessor is the sole owner of the Equipment and has sole title thereto, Lessee shall not make any representation to any third party inconsistent with Lessor's sole ownership of the Equipment. Lessee covenants with respect to each Lease that: (i) it will not pledge or encumber the Equipment or Lessor's interest in the Equipment in any manner whatsoever nor create or permit to exist any levy, lien or encumbrance thereof or thereon except those created by or through Lessor; (ii) the Equipment shall remain personal property whether or not affixed to realty and shall not become a fixture or be made to become a part of any real property on which it is placed without Lessor's prior written consent; and (iii) Lessee shall maintain the Equipment so that it does not become essential to and may be removed from any building in which it is placed without any damage to the building or the Equipment. Lessee may permit use of the Equipment by its affiliates or independent contractors at the Equipment Location provided it does not relinquish possession and control of the Equipment. Provided Lessee remains in possession and control of the Equipment, Lessee may relocate any Equipment from the Equipment Location specified in the applicable Schedule to another of its locations within the State of the Equipment Location upon prior written notice to Lessor specifying the new Equipment Location or to another of its locations within the United States after receiving the written consent of Lessor to such relocation. Lessee shall not locate or relocate any Equipment such that any third party comes into possession or control thereof without Lessor's prior written consent; provided, however, that Lessor shall not unreasonably withhold its consent to the location or relocation of Equipment to a third party co-location or hosting facility if such third party shall have executed and delivered to Lessor a waiver agreement in form and substance acceptable to Lessor pursuant to which, among other things, such third party shall have waived any rights to the Equipment and agreed to surrender the Equipment to Lessor in the event of a Lessee Default under this Master Agreement. Notwithstanding the foregoing, Lessor agrees that computer equipment usable outside of a fixed office environment, such as laptops, notebooks or similar PC Equipment (collectively, "Mobile PC Equipment") may be relocated on a non-permanent basis from the Equipment Location originally specified in the applicable Schedule without Lessor's prior written consent, provided that (i) such relocation is made by Lessee's primary employee in the custody and control of such Mobile PC Equipment; (ii) the primary employee remains in possession and control of the Mobile PC Equipment, and (iii) the primary employee's principal office is the Equipment Location. For purposes of this Master Agreement and any applicable Schedule, the term Equipment shall be deemed to include all Mobile PC Equipment.

13. RISK OF LOSS AND INSURANCE. Lessee assumes any and all risk of loss or damage to the Equipment from the time such Equipment is delivered to Lessee until such Equipment is returned to and is received by Lessor in accordance with the terms and conditions of this Master Agreement. Lessee agrees to keep the Equipment insured at Lessee's expense against all risks of loss from any cause whatsoever, including without limitation, loss by fire (including extended coverage), theft and damage. Lessee agrees that such insurance shall name Lessor or its assignee, if applicable, as a loss payee and cover not less than the Stipulated Loss Value of the Equipment. Lessee also agrees that it shall carry commercial general liability insurance in an amount not less than $2,000,000 total liability per occurrence and cause Lessor and its affiliates and its and their successors and assigns, to be named additional insureds under such insurance. Each policy shall provide that the insurance cannot be canceled without at least 30 days' prior written notice to Lessor, or its assignee if applicable, and no policy shall contain a deductible in excess of $25,000. Upon Lessor's prior written consent, in lieu of maintaining insurance obtained by third party insurance carriers, Lessee may self insure against such risks, provided that Lessor's interests are protected to the same extent as if the insurance had been obtained by third party insurance carriers and provided further that such self insurance program is consistent with prudent business practices with respect with such insurance risk. Lessee shall provide to Lessor, or its assignee, if applicable, (a) on or prior to the Acceptance Date for each Lease, and from time to time thereafter, certificates of insurance evidencing such insurance coverage throughout the Total Term of each Lease, and (b) upon Lessor's request, copies of the insurance policies. If Lessee fails to provide Lessor or its assigns with such evidence, then Lessor will have the right, but not the obligation, to purchase such insurance protecting Lessor at Lessee's expense. Lessee's expense shall include the full premium paid for such insurance and any customary charges, costs or fees of Lessor. Lessee agrees to pay such amounts in substantially equal installments allocated to each Rent payment (plus interest on such amounts at the rate of 1-1/2% per month or such lesser rate as is the maximum rate allowable under applicable law).

14. CASUALTY LOSS. Lessee shall notify Lessor of any Casualty Loss or repairable damage to any Equipment as soon as reasonably practicable after the date of any such occurrence but in no event later than 30 days after such occurrence. In the event any Casualty Loss shall occur, on the next Rent payment date Lessee shall (a) at Lessee's option provided no Lessee Default has occurred nor an event that with the passage of time or provision of notice would constitute a Lessee Default has occurred and is continuing or (b) at Lessor's option if a Lessee Default has occurred or an event that with the passage of time or provision of notice would constitute a Lessee Default has occurred and is continuing (1) subject to Section 7 hereof, pay Lessor the Stipulated Loss Value of the Equipment suffering the Casualty Loss, or (2) substitute and replace each item of Equipment suffering the Casualty Loss with an item of Substitute Equipment. If Lessee shall pay the Stipulated Loss Value of the Equipment suffering a Casualty Loss, upon Lessor's receipt in full of such payment the applicable Lease shall terminate as it relates to such Equipment and, except as provided in Section 26, Lessee shall be relieved of all obligations under the applicable Lease as it relates to such Equipment. If Lessee shall replace Equipment suffering a Casualty Loss with items of Substitute Equipment (i) the applicable Lease shall continue in full force and effect without any abatement of Rent with such Substitute Equipment thereafter being deemed to be Equipment leased thereunder, and (ii) Lessee shall deliver to Lessor a bill of sale or other documentation, in either case in form and substance satisfactory to Lessor, in which Lessee shall represent and warrant that it has transferred to Lessor good and marketable title to all Substitute Equipment, free and clear of all liens, encumbrances and claims of others. Upon Lessor's receipt of such payment of Stipulated Loss Value in full, or such bill of sale or other documentation, as the case may be, Lessor shall transfer to Lessee all of Lessor's interest in the Equipment suffering the Casualty Loss "AS IS, WHERE IS," without any warranty, express or implied, from Lessor, other than the absence of any liens or claims by or through Lessor. In the event of any repairable damage to any

Equipment, the Lease shall continue with respect to such Equipment without any abatement of Rent and Lessee shall, at its expense, from insurance proceeds or other funds legally available, promptly cause such Equipment to be repaired to the condition it is required to be maintained pursuant to Section 11.

15. TAXES. Lessor shall report and pay all Taxes now or hereafter imposed or assessed by any governmental body, agency or taxing authority upon the purchase, ownership, delivery, installation, leasing, rental, use or sale of the Equipment, the Rent or other charges payable hereunder, or otherwise upon or in connection with any Lease, whether assessed on Lessor or Lessee, other than any such Taxes required by law to be reported and paid by Lessee. Lessee shall promptly reimburse Lessor for all such Taxes paid by Lessor, together with any penalties or interest in connection therewith attributable to Lessee's acts or failure to act, excluding (a) Taxes on or measured by the overall gross or net income or items of tax preference of Lessor, (b) as to any Lease the related Equipment, Taxes attributable to the period after the return of such Equipment to Lessor, and (c) Taxes imposed as a result of a sale or other transfer by Lessor of any portions of its interest in any Lease or in any Equipment except for a sale of other transfer to Lessee or a sale or other transfer occurring after and during the continuance of any Lessee Default.

16. GENERAL INDEMNITY. Lessee, to the extent permitted by law, shall indemnify and hold harmless Lessor and assignees, from and against any and all Claims arising directly or indirectly out of or in connection with any matter involving this Master Agreement, the Equipment or any Lease, including but not limited to the selection, manufacture, purchase, acceptance, rejection, ownership, delivery, lease, possession, maintenance, use (including any patent, trademark or copyright infringement), condition, return or operation of any Equipment or the enforcement of Lessor's rights under any Lease. Notwithstanding the foregoing, Lessee shall have no obligation to indemnify or defend against any Claim arising solely as a result of Lessor's gross negligence or willful misconduct.

17. COVENANT OF QUIET ENJOYMENT. So long as no Lessee Default exists, and no event shall have occurred and be continuing which, with the giving of notice or the passage of time or both, would constitute a Lessee Default, neither Lessor nor any party acting or claiming through Lessor, by assignment or otherwise, will disturb Lessee's quiet enjoyment of the Equipment during the Total Term of the related Lease.

18. DISCLAIMERS AND LESSEE WAIVERS. LESSEE LEASES THE EQUIPMENT FROM LESSOR "AS IS, WHERE IS". IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT (A) EXCEPT AS EXPRESSLY SET FORTH IN SECTION 17, LESSOR MAKES ABSOLUTELY NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE DESIGN, COMPLIANCE WITH SPECIFICATIONS, QUALITY, OPERATION, OR CONDITION OF ANY EQUIPMENT (OR ANY PART THEREOF), THE MERCHANTABILITY OR FITNESS OF EQUIPMENT FOR A PARTICULAR PURPOSE, OR ISSUES REGARDING PATENT INFRINGEMENT, TITLE AND THE LIKE; (B) LESSOR SHALL NOT BE DEEMED TO HAVE MADE, BE BOUND BY OR LIABLE FOR, ANY REPRESENTATION, WARRANTY OR PROMISE MADE BY THE SUPPLIER OF ANY EQUIPMENT (EVEN IF LESSOR IS AFFILIATED WITH SUCH SUPPLIER); (C) LESSOR SHALL NOT BE LIABLE FOR ANY FAILURE OF ANY EQUIPMENT OR ANY DELAY IN THE DELIVERY OR INSTALLATION THEREOF; (D) LESSEE HAS SELECTED ALL EQUIPMENT WITHOUT LESSOR'S ASSISTANCE; AND (E) LESSOR IS NOT A MANUFACTURER OF ANY EQUIPMENT. IT IS FURTHER AGREED THAT LESSOR SHALL HAVE NO LIABILITY TO LESSEE, LESSEE'S CUSTOMERS, OR ANY THIRD PARTIES FOR ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS MASTER AGREEMENT OR ANY SCHEDULE OR CONCERNING ANY EQUIPMENT, OR FOR ANY DAMAGES BASED ON STRICT OR ABSOLUTE TORT LIABILITY OR LESSOR'S NEGLIGENCE; PROVIDED, HOWEVER, THAT NOTHING IN THIS MASTER AGREEMENT SHALL DEPRIVE LESSEE OF ANY RIGHTS IT MAY HAVE AGAINST ANY PERSON OTHER THAN LESSOR. LESSOR AND LESSEE AGREE THAT THE LEASES SHALL BE GOVERNED BY THE EXPRESS PROVISIONS OF THIS MASTER AGREEMENT AND THE OTHER FUNDAMENTAL AGREEMENTS AND NOT BY THE CONFLICTING PROVISIONS OF ANY OTHERWISE APPLICABLE LAW. ACCORDINGLY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, LESSEE WAIVES ANY RIGHTS AND REMEDIES CONFERRED UPON A LESSEE BY ARTICLE 2A OF THE UCC (INCLUDING, BUT NOT LIMITED TO, LESSEE'S RIGHTS, CLAIMS AND DEFENSES UNDER UCC SECTIONS 2A-303 AND 2A-508 THROUGH 2A-522) AND THOSE RIGHTS NOW OR HEREAFTER CONFERRED BY STATUTE OR OTHERWISE, IN EITHER CASE THAT ARE INCONSISTENT WITH OR THAT WOULD LIMIT OR MODIFY LESSOR'S RIGHTS SET FORTH IN THIS MASTER AGREEMENT.

19. LESSEE WARRANTIES. Lessee represents, warrants and covenants to Lessor and its assignees with respect to each Lease that: (a) Lessee is an agency or department of, or a political subdivision of the state in which it is located; (b) Lessee has the power and authority to enter into each of the Fundamental Agreements; (c) all Fundamental Agreements are legal, valid and binding obligations of Lessee, enforceable against Lessee in accordance with their terms and do not violate or create a default under any instrument or agreement binding on Lessee; (d) there are no pending or threatened actions or proceedings before any court or administrative agency that could reasonably be expected to have a material adverse effect on Lessee or any Fundamental Agreement, unless such actions have been disclosed to Lessor and consented to in writing by Lessor; (e) Lessee shall comply in all material respects with all laws and regulations the violation of which could have a material adverse effect upon the Equipment or Lessee's performance of its obligations under any Fundamental Agreement; (f) each Fundamental Agreement shall be effective against all creditors of Lessee under applicable law, including fraudulent conveyance and bulk transfer laws, and shall raise no presumption of fraud; (g) all financial statements, certificates or summaries relating to Lessee's financial condition, fiscal budget or the assessment and collection of taxes and other related information furnished by Lessee shall be prepared in accordance with generally accepted accounting principles in the United States in effect at that time and shall fairly present Lessee's financial position as of the dates given on such statements; (h) since the date of the most recent annual financial statement, there has been no material adverse change in the financial condition of, or the level of assessment or collection of taxes by, the Lessee; (i) the Equipment, subject to the Lease, is essential to the immediate performance of a governmental or proprietary function by Lessee within the scope of its authority and will be used during the Term of the Lease only by Lessee and only to perform such function; (j) Lessee intends to use the Equipment for the entire Term of the Lease and all Equipment will be used for business purposes only and not for personal, family or household purposes; (k) Lessee has complied fully with all applicable law governing open meetings, public bidding and appropriations required in connection with the Lease and the acquisition of the Equipment; (l) there has been no material change in the budget for Lessee's current Fiscal Period since its adoption; (m) Lessee's obligations to pay Rent and any other amounts due under the Lease constitute a current expense and not a debt of Lessee under applicable state law; (n) no provision of the Lease constitutes a pledge of the tax or general revenues of Lessee; (o) Lessee does not export, re-export, or transfer any Equipment, Software, system software or source code or any direct product thereof to a prohibited destination, or to nationals of proscribed countries wherever located, without prior authorization from the United States government and other applicable governments; (p) Lessee does not use any Equipment, Software or system software or technology, technical data, or technical assistance related thereto or the products thereof in the design, development, or production of nuclear, missile, chemical, or biological weapons or transfer the same to a prohibited destination, or to nationals of proscribed countries wherever located, without prior authorization from the United States and other applicable governments; and (q) Lessee is not an entity designated by the United States government or any other applicable government with which transacting business without the prior consent of such government is prohibited.

20. DEFAULT. Any of the following shall constitute a default by Lessee (a "Lessee Default") under this Master Agreement and all Leases: (a) Lessee fails to pay any Rent payment or any other amount payable to Lessor under this Master Agreement or any Schedule within 10 days after its due date; or (b) Lessee defaults on or breaches any of the other terms and conditions of any Material Agreement, and fails to cure such breach within 10 days after written notice thereof from Lessor; or (c) any representation or warranty made by Lessee in any Material Agreement proves to be incorrect in any material respect when made or reaffirmed; or (d) any change occurs in relation to Lessee's financial condition that, in Lessor's opinion, would have a material adverse effect on Lessee's ability to perform its obligations under this Master Agreement or under any Schedule; or (e) Lessee becomes insolvent or fails generally to pay its debts as they become due; or (f) a proceeding under any bankruptcy, reorganization, arrangement of debt, insolvency or receivership law is filed by or against Lessee (and if such proceeding is involuntary, it is not dismissed

within 60 days after the filing thereof) or Lessee takes any action to authorize any of the foregoing matters; or (g) any letter of credit or guaranty issued in support of a Lease is revoked, breached, canceled or terminated (unless consented to in advance by Lessor); or (h) any Equipment is levied against, seized or attached.

21. REMEDIES. If a Lessee Default occurs, Lessor may, in its sole discretion, exercise one or more of the following remedies: (a) declare all amounts due and to become due during Lessee's current fiscal year under any or all Leases to be immediately due and payable; or (b) terminate this Master Agreement or any Lease; or (c) take possession of, or render unusable, any Equipment wherever the Equipment may be located, without demand or notice and without any court order or other process of law in accordance with Lessee's reasonable security procedures, and no such action shall constitute a termination of any Lease; or (d) require Lessee to deliver the Equipment to a location specified by Lessor; or (e) declare the Stipulated Loss Value for any or all Equipment to be due and payable as liquidated damages for loss of a bargain and not as a penalty and in lieu of any further Rent payments under the applicable Lease or Leases; or (f) proceed by court action to enforce performance by Lessee of any Lease and/or to recover all damages and expenses incurred by Lessor by reason of any Lessee Default; or (g) terminate any other agreement that Lessor may have with Lessee; or (h) exercise any other right or remedy available to Lessor at law or in equity. Also, Lessee shall pay Lessor (i) all costs and expenses that Lessor may incur to maintain, safeguard or preserve the Equipment, and other expenses incurred by Lessor in enforcing any of the terms, conditions or provisions of this Master Agreement (including reasonable legal fees and collection agency costs) and (ii) all costs incurred by Lessor in exercising any of its remedies hereunder (including reasonable legal fees). Upon repossession or surrender of any Equipment, Lessor will lease, sell or otherwise dispose of the Equipment in a commercially reasonable manner, with or without notice and at public or private sale, and apply the net proceeds thereof to the amounts owed to Lessor under this Master Agreement; provided, however, that Lessee will remain liable to Lessor for any deficiency that remains after any sale or lease of such Equipment. Any proceeds of any sale or lease of such Equipment in excess of the amounts owed to Lessor under this Master Agreement will be retained by Lessor. Lessee agrees that with respect to any notice of a sale required by law to be given, 10 days' notice will constitute reasonable notice. With respect to any exercise by Lessor of its right to recover and/or dispose of any Equipment or other Collateral securing Lessee's obligations under any Schedule, Lessee acknowledges and agrees as follows: (i) Lessor shall have no obligation, subject to the requirements of commercial reasonableness, to clean-up or otherwise prepare the Equipment or any other Collateral for disposition, (ii) Lessor may comply with any applicable state or federal law requirements in connection with any disposition of the Equipment or other Collateral, and any actions taken in connection therewith shall not be deemed to have adversely affected the commercial reasonableness of any such disposition, and (iii) Lessor may convey the Equipment and any other Collateral on an "AS IS, WHERE IS" basis, and without limiting the generality of the foregoing, may specifically exclude or disclaim any and all warranties, including any warranty of title or the like with respect to the disposition of the Equipment or other Collateral, and no such conveyance or such exclusion or such disclaimer of any warranty shall be deemed to have adversely affected the commercial reasonableness of any such disposition. These remedies are cumulative of every other right or remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise, and may be enforced concurrently therewith or from time to time.

22. PERFORMANCE OF LESSEE'S OBLIGATIONS. If Lessee fails to perform any of its obligations hereunder, Lessor may perform any act or make any payment that Lessor deems reasonably necessary for the maintenance and preservation of the Equipment and Lessor's interests therein; provided, however, that the performance of any act or payment by Lessor shall not be deemed a waiver of, or release Lessee from, the obligation at issue. All sums so paid by Lessor, together with expenses (including legal fees and costs) incurred by Lessor in connection therewith, shall be paid to Lessor by Lessee immediately upon demand.

23. TRUE LEASE; SECURITY INTEREST; MAXIMUM RATE. Each Lease is intended to be a "Finance Lease" as defined in Article 2A of the UCC, and Lessee hereby authorizes Lessor to file a financing statement to give public notice of Lessor's ownership of the Equipment. The parties' intent that each Lease be a "Finance Lease" within the meaning of Article 2A and the UCC shall have no effect on the characterization of any Lease for accounting purposes, which characterization shall be made by each party independently on the basis of generally accepted accounting principles in the United States in effect at the time. Lessee, by its execution of each Schedule, acknowledges that Lessor has informed it that (a) the identity of Seller is set forth in the applicable Schedule, (b) Lessee is entitled under Article 2A of the UCC to the promises and warranties, including those of any third party, provided to Lessor in connection with, or as a part of, the applicable Purchase Documents, and (c) Lessee may communicate with Seller and receive an accurate and complete statement of the promises and warranties, including any disclaimers and limitations of them or of remedies. If (1) notwithstanding the express intention of Lessor and Lessee to enter into a true lease, any Lease is ever deemed by a court of competent jurisdiction to be a lease intended for security, or (2) Lessor and Lessee enter into a Lease with the intention that it be treated as a lease intended as security by so providing in the applicable Schedule, then to secure payment and performance of Lessee's obligations under this Master Agreement and all Leases, Lessee hereby grants Lessor a purchase money security interest in the related Equipment and in all attachments, accessories, additions, substitutions, products, replacements, rentals and proceeds (including, without limitation, insurance proceeds) thereto as well as a security interest in any other equipment financed pursuant to this Master Agreement or any other agreement between Lessor and Lessee (collectively, the "Collateral"). In any such event, notwithstanding any provisions contained in this Master Agreement or in any Schedule, neither Lessor nor any Assignee shall be entitled to receive, collect or apply as interest any amount in excess of the maximum rate or amount permitted by applicable law. In the event Lessor or any Assignee ever receives, collects or applies as interest any amount in excess of the maximum amount permitted by applicable law, such excess amount shall be applied to the unpaid principal balance and any remaining excess shall be refunded to Lessee. In determining whether the interest paid or payable under any specific contingency exceeds the maximum rate or amount permitted by applicable law, Lessor and Lessee shall, to the maximum extent permitted under applicable law, characterize any non-principal payment as an expense or fee rather than as interest, exclude voluntary prepayments and the effect thereof, and spread the total amount of interest over the entire term of this Master Agreement and all Leases.

24. ASSIGNMENT. Lessor shall have the unqualified right to sell, assign, grant a security interest in or otherwise convey any part of its interest in this Master Agreement, any Lease or any Equipment, in whole or in part, without prior notice to or the consent of Lessee. If any Lease is sold, assigned, or otherwise conveyed, Lessee agrees that Lessor's purchaser, assignee or transferee, as the case may be ("Assignee") shall (a) have the same rights, powers and privileges that Lessor has under the applicable Lease, (b) have the right to receive from Lessee all amounts due under the applicable Lease; and (c) not be required to perform any obligations of Lessor, other than those that are expressly assumed in writing by such Assignee. Lessee agrees to execute such acknowledgements to such assignment as may be reasonably requested by Lessor or the Assignee. Lessee further agrees that, in any action brought by such Assignee against Lessee to enforce Lessor's rights hereunder, Lessee will not assert against such Assignee any set-off, defense or counterclaim that Lessee may have against Lessor or any other person. Unless otherwise specified by Lessor and the Assignee, Lessee shall continue to pay all amounts due under the applicable Lease to Lessor; provided, however, that upon notification from Lessor and the Assignee, Lessee covenants to pay all amounts due under the applicable Lease to such Assignee when due and as directed in such notice. Lessee further agrees that any Assignee may further sell, assign, grant a security interest in or otherwise convey its rights and interests under the applicable Lease with the same force and effect as the assignment described herein. Lessee may not assign, transfer, sell, sublease, pledge or otherwise dispose of this Master Agreement, any Lease, any Equipment or any interest therein.

25. FURTHER ASSURANCES. Lessee agrees to promptly execute and deliver to Lessor such further documents and take such further action as Lessor may require in order to more effectively carry out the intent and purpose of this Master Agreement and any Schedule. Without limiting the generality of the foregoing, Lessee agrees (a) to furnish to Lessor from time to time, its certified financial statements, officer's certificates and appropriate resolutions, opinions of counsel and such other information and documents as Lessor may reasonably request, and (b) to execute and timely deliver to Lessor such documents that Lessor deems necessary to perfect or protect Lessor's security interest in the Collateral or to evidence Lessor's interest in the Equipment. It is also agreed that Lessor or Lessor's agent may file as a financing statement, any lease document (or copy thereof, where permitted by law) or other financing statement that Lessor deems appropriate to perfect or protect Lessor's security interest in the Collateral or to evidence Lessor's interest in the Equipment. Lessee hereby appoints Lessor and any agent of Lessor as Lessee's attorney-in-fact, with full power of substitution in its place and stead, in its name or in the name of Lessor to from time to time in Lessor's sole discretion take any action and to execute any instrument which Lessor may deem necessary or advisable to protect Lessor's interests hereunder. Lessee acknowledges and agrees that such

appointment is coupled with an interest and is irrevocable until the expiration or termination of all Leases and financings and the satisfaction by Lessee of all of its obligations hereunder. Upon demand, Lessee will promptly reimburse Lessor for any filing or recordation fees or expenses (including legal fees and costs) incurred by Lessor in perfecting or protecting its interests in any Collateral. Lessee represents and warrants that Lessee's name as set forth in the signature block below is Lessee's full and accurate legal name and that the information set forth on the first page hereof regarding its organization number, tax identification number and location is true and correct as of the date hereof. Lessee further agrees to provide Lessor advance written notice of any change in the foregoing.

26. TERM OF MASTER AGREEMENT; SURVIVAL. This Master Agreement shall commence and be effective upon the execution hereof by both parties and shall continue in effect until terminated by either party by 30 days prior written notice to the other, provided that the effective date of the termination is after all obligations of Lessee arising hereunder and pursuant to any Schedule have been fully satisfied. Notwithstanding the foregoing, all representations, warranties and covenants made by Lessee hereunder shall survive the termination of this Master Agreement and shall remain in full force and effect. All of Lessor's rights, privileges and indemnities under this Master Agreement or any Lease, to the extent they are fairly attributable to events or conditions occurring or existing on or prior to the expiration or termination of such Lease, shall survive such expiration or termination and be enforceable by Lessor and Lessor's successors and assigns.

27. WAIVER OF JURY TRIAL. LESSEE AND LESSOR HEREBY EXPRESSLY WAIVE ANY RIGHT TO DEMAND A JURY TRIAL WITH RESPECT TO ANY ACTION OR PROCEEDING INSTITUTED BY LESSOR OR LESSEE IN CONNECTION WITH THIS MASTER AGREEMENT OR ANY FUNDAMENTAL AGREEMENT.

28. NOTICES. All notices, requests, demands, waivers and other communications required or permitted to be given under this Master Agreement or any other Fundamental Agreement shall be in writing and shall be deemed to have been received upon receipt if delivered personally or by a nationally recognized overnight courier service, or by confirmed facsimile transmission, or 3 days after deposit in the United States mail, certified, postage prepaid with return receipt requested, addressed as follows (or such other address or fax number as either party shall so notify the other):

If to Lessor:	If to Lessee:
Hewlett Packard Company	_____
	_____
Attn:	Attn: _____("Authorized Lessee Representative")
Fax	Fax:

29. MISCELLANEOUS

(a) Governing Law. THIS MASTER AGREEMENT AND EACH LEASE SHALL BE GOVERNED BY THE INTERNAL LAWS (AS OPPOSED TO CONFLICTS OF LAW PROVISIONS) OF THE STATE OF EQUIPMENT LOCATION.

(b) Credit Review. Lessee consents to a reasonable credit review by Lessor for each Lease.

(c) Captions and References. The captions contained in this Master Agreement and any Schedule are for convenience only and shall not affect the interpretation of this Master Agreement or any Lease. All references in this Master Agreement to Sections and Exhibits refer to Sections hereof and Exhibits hereto unless otherwise indicated.

(d) Entire Agreement; Amendments. This Master Agreement and all other Fundamental Agreements executed by both Lessor and Lessee constitute the entire agreement between Lessor and Lessee relating to the leasing of the Equipment, and supersede all prior agreements relating thereto, whether written or oral, and may not be amended or modified except in a writing signed by the parties hereto.

(e) No Waiver. Any failure of Lessor to require strict performance by Lessee, or any written waiver by Lessor of any provision hereof, shall not constitute consent or waiver of any other breach of the same or any other provision hereof.

(f) Lessor Affiliates. Lessee understands and agrees that Hewlett-Packard Company or any affiliate or subsidiary thereof may, as lessor, execute Schedules under this Master Agreement, in which event the terms and conditions of the applicable Schedule and this Master Agreement as it relates to the lessor under such Schedule shall be binding upon and shall inure to the benefit of such entity executing such Schedule as lessor, as well as any successors or assigns of such entity. Lessee agrees that Lessor may disclose any information provided by Lessee to Lessor or created by Lessor in the course of administering the Material Agreements to any parent or affiliate of Lessor.

(g) Invalidity. If any provision of this Master Agreement or any Schedule shall be prohibited by or invalid under law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Master Agreement or such Schedule.

(h) Counterparts. This Master Agreement may be executed in counterparts, which collectively shall constitute one document.

(i) Lessor Reliance. Lessor may act in reliance upon any instruction, instrument or signature reasonably believed by Lessor in good faith to be genuine. Lessor may assume that any employee of Lessee who executes any document or gives any written notice, request or instruction has the authority to do so.

30 DEFINITIONS. All capitalized terms used in this Master Agreement have the meanings set forth below or in the Sections of this Master Agreement referred to below:

"Acceptance Certificate" means an Acceptance Certificate in substantially the form of Exhibit B executed by Lessee and delivered to Lessor in accordance with Section 3.

"Acceptance Date" means, as to any Lease, the date Lessee shall have accepted the Equipment subject to such Lease in accordance with Section 3.

"Authorized Lessee Representative" has the meaning specified in Section 28.

"Assignee" means any assignee of all or any portion of Lessor's interest in this Master Agreement, any Schedule or any Equipment, whether such assignee received the assignment of such interest from Lessor or a previous assignee of such interest.

"Casualty Loss" means, with respect to any Equipment, the condemnation, taking, loss, destruction, theft or damage beyond repair of such Equipment.

"Casualty Value" means, as to any Equipment, an amount determined as of the date of the Casualty Loss or Lessee Default in question pursuant to a "Table of Casualty Values" attached to the applicable Schedule or, if no "Table of Casualty Values" is attached to the applicable Schedule, an amount equal to the sum of (i) the present value as of the date of the Casualty Loss or Lessee Default in question (discounted at 5% per annum, compounded monthly) of all Rent payments payable after such date through the scheduled date of expiration of the Then Applicable Term, plus (ii) the present value as of the date of the Casualty Loss or Lessee Default in question (discounted at 5% per annum, compounded monthly, from the scheduled date of expiration of the Then Applicable Term) of an amount determined by multiplying the applicable casualty percentage specified below by the Total Cost of such Equipment. The applicable casualty percentage shall be 35% for Equipment having an Initial Term of less than 24 months; 30% for Equipment having an Initial Term of 24 months or greater, but less than 36 months; 25% for Equipment having an Initial Term of 36 months or greater, but less than 48 months; and 20% for Equipment having an Initial Term of 48 months or greater.

"Claims" means all claims, actions, suits, proceedings, costs, expenses (including, without limitation, court costs, witness fees and attorneys' fees), damages, obligations, judgments, orders, penalties, fines, injuries, liabilities and losses, including, without limitation, actions based on Lessor's strict liability in tort.

"Code" means the Internal Revenue Code of 1986, as amended.

"Collateral" has the meaning specified in Section 23.

"Daily Rent" means, as to any Lease, an amount equal to the per diem Rent payable under the applicable Schedule (calculated on the basis of a 360 day year and 30 day months).

"End-of-Term Notice" means, as to any Lease, a written notice delivered by Lessee to Lessor at least 90 days prior to the end of the Initial Term, any Renewal Term or any optional extension of the Initial Term or any Renewal Term setting forth Lessee's elections pursuant to Section 4 with respect to the Equipment subject to such Lease. Each End-of-Term Notice shall specify on a line item basis and in the same format as the Equipment is described in the applicable Schedule (or if different, in the applicable Acceptance Certificate) the Units of Equipment to be purchased by Lessee (if any), as to which the Lease is to be renewed (if any) and that are to be returned to Lessor (if any).

"Equipment" has the meaning specified in Section 1.

"Equipment Location" means, as to any Equipment, the address at which such Equipment is located from time to time, as originally specified in the applicable Schedule and as subsequently specified in a notice delivered to Lessor pursuant to Section 12, if applicable.

"Fair Market Value" means the total price that would be paid for any specified Equipment in an arm's length transaction between an informed and willing buyer (other than a used equipment dealer) under no compulsion to buy and an informed and willing seller under no compulsion to sell. Such total price shall not be reduced by the costs of removing such Equipment from its current location or moving it to a new location.

"Fair Rental Value" means the amount of periodic rent that would be payable for any specified Equipment in an arm's length transaction between an informed and willing lessee and an informed and willing lessor, neither under compulsion to lease. Such amount shall not be reduced by the costs of removing such Equipment from its current location or moving it to a new location.

"Final Invoice Amount" has the meaning set forth in Section 2(c).

"First Payment Date" means, as to any Lease, the date the first Rent payment with respect to the Initial Term of such Lease is due, as determined pursuant to the terms of the applicable Schedule.

"Fiscal Period" shall mean the fiscal year of Lessee, as it may be more particularly described in a Schedule.

"Fundamental Agreements" means, collectively, this Master Agreement, each Schedule and Acceptance Certificate and all other related instruments and documents.

"Hardware" means items of tangible equipment and other property.

"Initial Term" means, as to any Lease, the initial term thereof as specified in the related Schedule.

"Lease" has the meaning specified in Section 2(a).

"Lessee" has the meaning specified in the preamble hereof.

"Lessee Default" has the meaning specified in Section 20.

"Lessor" has the meaning specified in the preamble hereof.

"License Agreement" means any license agreement or other document granting the purchaser the right to use Software or any technical information, confidential business information or other documentation relating to Hardware or Software, as amended, modified or supplemented by any other agreement between the licensor and Lessor.

"Master Agreement" has the meaning specified in the preamble hereof.

"Material Agreements" means, collectively, all Fundamental Agreements, all other material agreements by and between Lessor and Lessee, and any application for credit, financial statement, or financial data required to be provided by Lessee in connection with any Lease.

"Mobile PC Equipment" has the meaning specified in Section 12 hereof.

"Non-Appropriation" has the meaning specified in Section 7.

"Optional Additions" has the meaning specified in Section 11.

"PC Equipment" means, collectively, personal computers (e.g., workstations, desktops and notebooks) and related items of peripheral equipment (e.g., monitors, printers and docking stations).

"Purchase Documents" means, as to any Equipment, any purchase order, contract, bill of sale, License Agreement, invoice and/or other documents that Lessee has, at any time, approved, agreed to be bound by or entered into with any Supplier of such Equipment relating to the purchase, ownership, use or warranty of such Equipment.

"Renewal Agreement" has the meaning specified in Section 4.

"Renewal Term" has the meaning specified in Section 4.

"Rent" has the meaning specified in Section 5.

"Schedule" means, unless the context shall otherwise require a Schedule executed by Lessor and Lessee pursuant to Section 2(a).

"Seller" means, as to any Equipment, the seller of such Equipment as specified in the applicable Schedule.

"Software" means copies of computer software programs owned or licensed by Lessor, and any disks, CDs, or other media on which such programs are stored or written.

"State" means any of the states of the United States, its territories and possessions.

"Stipulated Loss Value" means, as to any Equipment, an amount equal to the sum of (a) all Rent and other amounts due and owing with respect to such Equipment as of the date of payment of such amount, plus (b) the Casualty Value of such Equipment.

"Substitute Equipment" means, as to any item of Hardware or Software subject to a Lease, a substantially equivalent or better item of Hardware or Software having equal or greater capabilities and equal or greater Fair Market Value manufactured or licensed by the same manufacturer or licensor as such item of Hardware or Software subject to a Lease. The determination of whether any item of Equipment is substantially equivalent or better than an item of Equipment subject to a Lease shall be based on all relevant facts and circumstances, but shall minimally require, in the case of a computer, that each of processor, hard-drive, random access memory and CD ROM drive, if applicable, be equivalent or better.

"Supplier" means as to any Equipment, the Seller and the manufacturer or licensor of such Equipment collectively, or where the context requires, any of them. In certain Leases, the Supplier may be Lessor.

"System Software" means an item of Software that is pre-loaded on an item of Hardware purchased by Lessor for lease hereunder for which the relevant Purchase Documents specify no purchase price separate from the aggregate purchase price specified for such items of Hardware and Software.

"Taxes" means all license and registration fees and all taxes (local, state and federal), fees, levies, imposts, duties, assessments, charges and withholding of any nature whatsoever, however designated (including, without limitation, any value added, transfer, sales, use, gross receipts, business, occupation, excise, personal property, real property, stamp or other taxes) other than taxes measured by Lessor's income.

"Term" means the term thereof as specified in the related Schedule.

"Then Applicable Term" means, as to any Lease, the term of the Lease in effect at the time of determination, whether it be the Initial Term, any Renewal Term or any optional or other automatic extension of the Initial Term or any Renewal Term pursuant to Section 4.

"Total Cost" means as to any Lease, the total acquisition cost to Lessor of the Equipment subject to such Lease as set forth in the applicable Purchase Documents, including related delivery, installation, taxes and other charges which Lessor has agreed to pay and treat as a portion of such acquisition cost, if any.

"Total Term" means, as to any Lease, the aggregate term of such Lease, including the Initial Term, any Renewal Term and any optional or other automatic extension of the Initial Term or any Renewal Term pursuant to Section 4.

"UCC" means the Uniform Commercial Code as enacted and in effect in any applicable jurisdiction.

"Unit of Equipment" means, as to the Equipment leased pursuant to any Schedule (a) each individual item of PC Equipment leased pursuant to such Schedule, and (b) all Equipment taken as a whole leased pursuant to such Schedule other than PC Equipment taken as a whole.

IN WITNESS WHEREOF, LESSEE AND LESSOR HAVE EXECUTED THIS MASTER AGREEMENT ON THE DATES SPECIFIED BELOW.

LESSEE:

_____

By:_____

_____
Name and Title

_____
Date

LESSOR:
HEWLETT-PACKARD COMPANY

By:_____

_____
Name and Title

_____
Date

to Master Agreement

Exhibit A

Master Agreement Number _____
Schedule Number _____

COUNTERPART NO. _____ OF _____. TO THE EXTENT THAT THIS SCHEDULE CONSTITUTES CHATTEL PAPER (AS DEFINED ON THE UCC), NO SECURITY INTEREST IN THIS SCHEDULE MAY BE CREATED THROUGH THE TRANSFER OR POSSESSION OF ANY COUNTERPART OTHER THAN COUNTERPART NO. 1.

STATE AND LOCAL GOVERNMENT MASTER OPERATING LEASE AGREEMENT
SCHEDULE

Hewlett-Packard Company ("Lessor") and_____, an agency, department or political subdivision of the State of _____ ("Lessee") are parties to the State and Local Government Master Operating Lease Agreement identified by the Master Agreement Number specified above (the "Master Agreement"). This Schedule (which shall be identified by the Schedule Number specified above) and the Master Agreement together comprise a separate Lease between the parties. The terms and conditions of the Master Agreement are hereby incorporated by reference into this Schedule. All capitalized terms used in this Schedule without definition have the meanings ascribed to them in the Master Agreement.

9. **LEASE.**
   A. Description of Items of Leased Equipment **Total Cost**

   B. Initial Term: ____ Months.

10. **RENT**: $_____

    RENT is payable: ___in advance ___in arrears (check one) ____monthly ____quarterly (check one) ____semi-annually ____annually

    - **If the Rent is due in advance, then the first Rent payment shall be due on the Acceptance Date. If the Rent is due in arrears, then the first Rent payment shall be due at the end of the first payment frequency period as selected above.**

11. **LATEST COMMENCEMENT DATE**: _____. Lessor's obligation to purchase and lease the Equipment is subject to the Acceptance Date being on or before the Latest Commencement Date.

12. **EQUIPMENT LOCATION:**_____

13. **SELLER:** _____

14. **APPROPRIATIONS:** Monies for all Rent and other payments due under the Lease for the Fiscal Period ending _____ are available from Lessee's appropriated funds for such Fiscal Period and that appropriations and/or other funds have been encumbered or designated for the payment of all Rent and other payments that shall become due under the Lease in such Fiscal Period.

15. **ADDITIONAL PROVISIONS:**

16. **FISCAL PERIOD: ___[Annual]_____**

LESSOR AGREES TO LEASE TO LESSEE AND LESSEE AGREES TO LEASE FROM LESSOR THE EQUIPMENT DESCRIBED IN SECTION 1.A ABOVE. SUCH LEASE WILL BE GOVERNED BY THE MASTER AGREEMENT AND THIS SCHEDULE, INCLUDING THE IMPORTANT ADDITIONAL TERMS AND CONDITIONS SET FORTH ABOVE. IN THE EVENT OF ANY CONFLICT BETWEEN THE TERMS OF THIS SCHEDULE AND THE MASTER AGREEMENT, THE TERMS OF THIS SCHEDULE SHALL GOVERN. LESSEE HEREBY REPRESENTS AND WARRANTS THAT ON AND AS OF THE DATE HEREOF EACH OF THE REPRESENTATIONS AND WARRANTIES MADE BY LESSEE IN THE MASTER AGREEMENT ARE TRUE, CORRECT AND COMPLETE.

LESSEE:	**LESSOR:** **HEWLETT-PACKARD COMPANY**
_____	
By:_____	**By:**_____
_____ **Name and Title**	_____ **Name and Title**
_____ **Date**	_____ **Date**

to Master Agreement

Exhibit B

Master Agreement Number _____
Schedule Number _____

STATE AND LOCAL GOVERNMENT MASTER OPERATING LEASE AGREEMENT
ACCEPTANCE CERTIFICATE

Hewlett-Packard Company ("Lessor") and_____, an agency, department or political subdivision of the State of _____ ("Lessee") are parties to the State and Local Government Master Operating Lease Agreement (the "Master Agreement") and Schedule under such Master Agreement (the "Schedule") identified by the Master Agreement Number and Schedule Number, respectively, specified above. The Master Agreement and Schedule together comprise a separate Lease, that is being accepted and commenced pursuant to this Acceptance Certificate. All capitalized terms used in this Acceptance Certificate without definition have the meanings ascribed to them in the Master Agreement.

1. LEASE ACCEPTANCE. Lessee hereby acknowledges that the Equipment described in Section 1 of the Schedule, or if different, the Equipment described in the attached invoice or other attachment hereto, has been delivered to the Equipment Location specified below, inspected by Lessee and found to be in good operating order and condition, and has been unconditionally and irrevocably accepted by Lessee under the Lease evidenced by the Master Agreement and the Schedule as of the Acceptance Date set forth below. Lessee authorizes Lessor to adjust the Rent payments on the Schedule to reflect the Final Invoice Amount set forth on the attached invoice(s) if such amount is different than the Total Cost on the Schedule.

2. LESSEE ACKNOWLEDGEMENTS. Lessee hereby agrees to faithfully perform all of its obligations under the Master Agreement and the Schedule and reaffirms, as of the date hereof, its representations and warranties as set forth in the Master Agreement. Lessee hereby acknowledges its agreement to pay Lessor Rent payments, as set forth in the Schedule, plus any applicable taxes, together with all other costs, expenses and charges whatsoever which Lessee is required to pay pursuant to the Master Agreement and the Schedule, in each instance at the times, in the manner and under the terms and conditions set forth in the Master Agreement and the Schedule, respectively.

3. EQUIPMENT LOCATION. The Equipment has been installed and is located at the following Equipment Location:

_____

_____

4. REPRESENTATIONS AND WARRANTIES. Lessee hereby represents and warrants that on and as of the date hereof each of the representations and warranties made by Lessee in the Master Agreement are true, correct and complete.

[LESSEE]
By:_____

_____
Name and Title

Acceptance Date:_____

HP Appendix D— Professional Development Partners and Programs

Proposal Reference: Section 10 Professional Development

The following organizations have teamed with ENA and HP to provide their best professional development offerings to support the MLTI. The professional development plan leverages the skills and experience of each of the professional development partners. Each partner contributes a unique blend of educator, leadership and technology trainings delivered in a broad variety of modes that together meet and exceed the professional development requirements of the MLTI RFP as well as address the most difficult challenges identified.

Detailed information on each partner's professional development offerings is provided below.

Partners in Learning Vision

Every child deserves a great education - Microsoft Partners in Learning can help.

We believe that education can change the world.

We believe that education is the single most important investment in the future of individuals, communities, nations, and the world - that it is vital to sustainable social and economic success. It is also a fundamental human right. The reality is that education, globally, faces a crisis; a crisis of resources, of time, and of support. Governments need help. School leaders need help. Educators need help. Students need help.

That's where Microsoft Partners in Learning can lend a hand. We help educators and school leaders connect, collaborate, create, and share so that students can realize their greatest potential. We have the tools and the technology to help educators do what they do best: teaching kids and growing young minds. Microsoft Partners in Learning is a 10-year, almost 500 million dollar global initiative aimed at improving teaching and learning. Since 2003, we've led the way in partnering with educators, helping nearly 8 million educators and reaching more than 190 million students in 114 countries in our first 7 years alone.

We believe that technology is simply a tool that when used appropriately in an educational context can help improve teaching and learning. But technology is only one piece of a larger solution supported by peer coaching, professional development for school leaders and educators,

and the innovations in teaching and learning being led by educators on the ground, every day. Based on our Innovative Teaching and Learning (ITL) Research http://www.itlresearch.com/

As similar to the TPACK Framework, our global research has discovered many important findings around the maximum use of innovative teaching and learning.

Who?

ITL Research is the product of multinational research collaboration, with a design that is both global and local in scope. ITL's research network is led by SRI International, the organization responsible for research design, coordination, and global analysis. In each participating country, a leading research organization adapts common designs to local contexts and conducts local data collection, analysis, and reporting. The program is sponsored by Microsoft Partners in Learning in partnership with a governmental agency or policy organization in each country; in some countries these partners also fund the research. ITL Research is globally coordinated by Langworthy Research and benefits from the support of an advisory team of international experts.

What?

ITL Research focuses on teaching practices that have been shown to have strong relationships with 21st century learning outcomes, with a model that draws extensively from leading global research and frameworks (e.g., Law et al., 2008; OECD, 2006; UNESCO, 2008; Partnership for 21st Century Skills, 2004; Government of South Australia, 2008; ISTE, 2007, 2008). As shown in Figure 1, "innovative teaching" in this research refers to three categories of practices: **Figure 1: Innovative Teaching Practices and Students' 21st Century Skills**

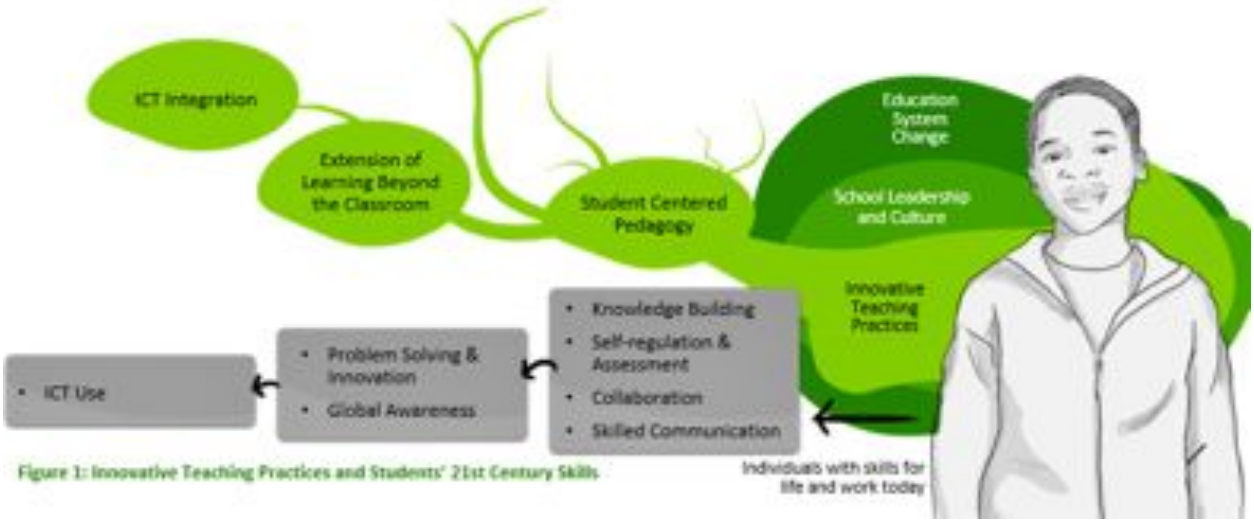
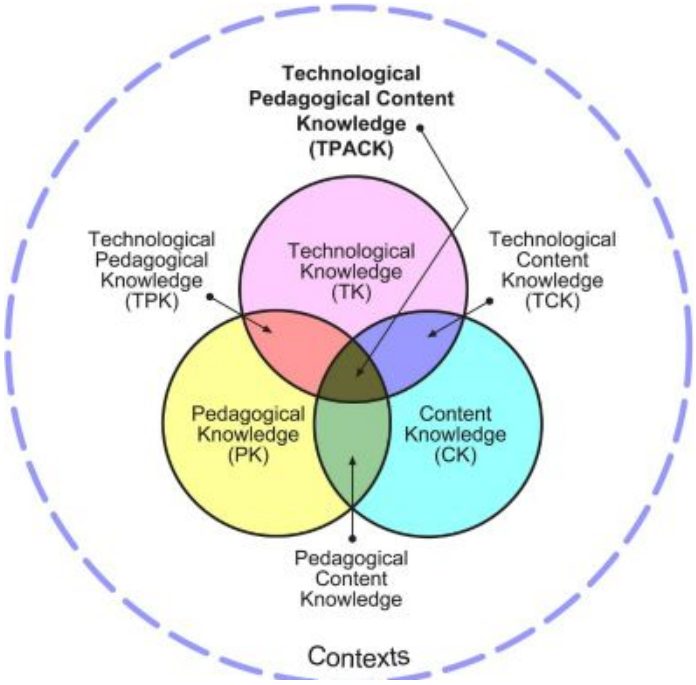


Figure 1: Innovative Teaching Practices and Students' 21st Century Skills

- Student-centered pedagogies that promote personalized and powerful learning for students;
- Extending learning beyond the classroom in ways most relevant to knowledge-building and problem-solving in today's world; and
- Technology integration into pedagogy in ways that support learning goals. It is important to note that Technology use is not a goal in itself, but a tool to broaden and deepen learning opportunities. Figure 1 also shows the specific elements that comprise "students' 21st century skills" in the ITL model.

Key Findings from ITL Research in 2011

- ✓ Innovative teaching supports students' development of the skills that will help them thrive in future life and work.
- ✓ However, students' opportunities to develop these skills are typically scarce and uneven, both within and across the sample of schools in the study (across all countries).
- ✓ While ICT use in teaching is becoming more common, ICT use by students in their learning is still an exception in many of these schools.
- ✓ Innovative teaching practices are more likely to flourish when particular supportive conditions are in place. These conditions include:
- ✓ Teacher collaboration that focuses on peer support and the sharing of teaching practices
- ✓ Professional development that involves the active and direct engagement of teachers, particularly in practicing and researching new teaching methods
- ✓ A school culture that offers a common vision of innovation as well as consistent support that encourages new types of teaching
- ✓ While we saw examples of innovative teaching practices in the classes we visited, a coherent and integrated set of conditions to support the adoption of innovative teaching was lacking in most of the schools and all of the systems in our sample.



TPACK has similar findings as excerpted from their website and reference in the RFP.

- *"At the heart of the TPACK framework, is the complex interplay of three primary forms of knowledge: Content (CK), Pedagogy (PK), and Technology (TK). The TPACK approach goes beyond seeing these three knowledge bases in isolation. TPACK also emphasizes the new kinds of knowledge that lie at the intersections*

between them, representing four more knowledge bases teachers applicable to teaching with technology: Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and the intersection of all three circles, Technological Pedagogical Content Knowledge (TPACK).

- *Effective technology integration for pedagogy around specific subject matter requires developing sensitivity to the dynamic, transactional relationship between these components of knowledge situated in unique contexts. Individual teachers, grade-level, school-specific factors, demographics, culture, and other factors ensure that every situation is unique, and no single combination of content, technology, and pedagogy will apply for every teacher, every course, or every view of teaching."*

In essence, this confirms the TPACK model and the ITL both agree that it is critical to blend the technology, pedagogy and the content for an effective teaching and learning model. It is through this approach that we are offering several methods and assets to maximize the potential creating an effective environment.

Additionally, we have worked closely with Dr. Punya Mishra through our Partners in Learning program and have embodied many of our programs and offerings with this type of framework in consideration. He is quoted below:

> *"The TPACK framework has increasingly been a crucial part of the efforts of the broader Microsoft Partners in Learning initiatives. I have been part of the ongoing conversations regarding this. Most specifically, the influence of the TPACK framework can been seen in the Teacher Education Initiative (TIE). I have been a key member of this project which has involved establishing a series of professional development workshop modules for several content areas, developed in collaboration with some of the top teacher educators in the nation. The TPACK framework is the foundation on which these modules are constructed. This emphasis and understanding of the importance of thinking of content, pedagogy and technology in coordination has significant promise in meeting the needs of developing the next generation of teachers and teacher educators who can meet the demands of 21st century learning."*
>
> Dr. Punya Mishra, Professor and Director
> Master's Program in Educational Technology, College of Education
> Michigan State University

Summary of Microsoft Professional Development Programs and Assets

Through our investments globally, we have created several programs that encourage and implement professional development for teachers, administrators, and principals to provide the most impactful teaching and learning environment within schools.

Microsoft, in partnership with HP and ENA, has solutions which help schools, districts and states:

- Support school leaders and educators with a broad-range of research-based and globally validated professional development solutions
- Assess and measure impact of professional development over time - - at the system, school, and individual educator level
- Builds capacity within districts and schools so that professional development becomes continuous and sustainable long-term
- Supports educators and school leaders through a global network providing inspiration and recognition for their learning achievements and the impact they have on students

Microsoft Innovative Educator Teacher Professional Development Program

The Microsoft Innovative Educator (MIE) Program is Microsoft's flagship professional development program that has trained educators across the United States for over three years reaching over 200,000 teachers with a scalable, training model focused on relevant, technology integration for all grade levels.

Project-based Learning & Technology Integration

The MIE Program is focused on guiding teachers and teacher leaders to effectively integrating technology in relevant ways in the classroom taking full advantage of many tools they already have. The professional development program is designed around the concepts of project-based learning integrating technology that most teachers have some familiarity with (e.g., Microsoft Office) enabling them to get more out of the tools they have, while exploring many free products that Microsoft makes available for teachers and students.

Customized Delivery Formats

The foundational format of the MIE Program is a 2-day, in-person, train-the-trainer program that delivers hands-on technology integration training embedded in a project-based pedagogical approach. All of the training has been modularized so it can be delivered in shorter sessions (e.g., 30 mins to 1 hr. in-service sessions) as well as via webinar or podcast.

The complete curriculum is easily customizable based on the skill levels of the teachers and is provided in a copyright-free Microsoft OneNote Notebook enabling further customization based on the teachers being trained and can be delivered in-person and through webinars.

A typical 2-day workshop format would focus on hands-on learning across these products and topics:

- Microsoft Office & Office 365 – desktop and cloud-based
- Microsoft OneNote – the ideal digital notebook for 1:1 environments

- Project-based Learning and Technology Integration
- Free Tools for Teachers & Students – movie making, photo creativity tools and much more
- Tips & Tricks for Using Microsoft Office & Windows in the Classroom
- Gaming & Learning in the Classroom with Kinect
- Microsoft Partners in Learning Network – Microsoft's free online community for educators include lesson plans, how-to's, free software, discussions groups, and online PD

Training to Support 1:1 Environments

A core element of the MIE training is focused on use of Microsoft OneNote. OneNote, part of Microsoft Office, is the ultimate digital notebook and the ideal application for 1:1 environments. OneNote is designed for tablet, PC, cloud and mobile environments, enabling students and teachers to organize notes, video, photos and voice in personal digital notebooks accessible on multiple devices and in the cloud. OneNote is embedded into all aspects of the Microsoft Innovative Educator training, and should be a fundamental tool when considering 1:1 deployments.

In addition to in-person delivery of teacher professional development, also available is a series of free e-learning courses through the Partners in Learning Network. The Teaching with Technology e-learning course is a series of self-paced online learning courses aligned to UNESCO ICT Competency Framework for Teachers and ISTE NETS for Teachers. These online learning courses are designed to be both self-serve as well as facilitated in a blended learning environment, all accessible through the Microsoft Partners in Learning Network.

Microsoft Innovative Educator Teacher Certificates

Any educator that completes the Microsoft Innovative Educator Program earns a MIE Certificate and has the opportunities to earn additional badges as they complete subsequent training, encouraging ongoing professional learning with documentation noting completion and achievement. The certificates can be used to track, monitor and acknowledge an educator's progress.

Online Resources and Support through the Partners in Learning Network

MIE Trainers (teacher leaders who have completed the 2-day MIE training), have access to a special online community of MIE trainers where best training practices are shared amongst teacher trainers to encourage and share creative and effective training practices.

All teachers have access to the Microsoft Partners in Learning Network, which is Microsoft's global community of over 4.6 million educators, who are actively sharing lesson plans, how-to tutorials and participating in discussion groups that support the products and approaches outlined in the Microsoft Innovative Educator Program.

For more information on the Microsoft Innovative Educator (MIE) Program:

- Program Overview, sample agenda and a short video: www.microsoft.com/innovativeeducator

- MIE Professional Development Community on the Partners in Learning Network: http://bit.ly/MIEcomm

Windows in the Classroom

This three hour seminar will be added to the MIE professional development workshop extending the workshop to 3 days. This seminar will help you explore the tools and technologies available to help educators teach 21st century skills and optimize the classroom for advanced student achievement. It's a great starting point for any school considering a 1-to-1 learning program, and it allows you to see the diversity of Microsoft software and devices applied to learning.

The seminar will:

- Include rich curriculum samples and global examples of best practices that demonstrate how technology can enhance teaching, learning, and assessment for students.
- Help you understand how technology and devices enable consumption, creation, and collaboration for students, educators, and parents.
- Demonstrate how different devices can bring learning to life in a range of scenarios.
- Show how students can continue learning where they left off – at home, in the library, or at the park.
- Illuminate how students can organize their learning, take notes, and become highly efficient in the way they study.
- Demonstrate free tools that spark imagination and inspire learning and show you where to get them for your school and classrooms.

Agenda

- Introduction to Windows 8
- Exploring the Innovative Teaching and Learning Research
- Supporting Community and Collaboration through the Partners in Learning Network
- The Ultimate Collaboration and Learning Tool for the Classroom – OneNote
- The world is your classroom – Using Lync to connect your students to the wider world
- Share, and Share again using Skydrive and Office 365
- New ways to learn – Kinect in the Classroom

- Education Application that will help the educator support student learning – Explore the applications in Microsoft Learning Suite including; Microsoft Math, World Wide Telescope, Photosynth, Community Clips, Auto Collage and many other free tools.
- How will you use these tools in your classroom? Questions for the group and for the presenter

To Learn more about Windows in the Classroom go to
http://www.microsoft.com/education/ww/leadership/Pages/Windows-in-the-Classroom.aspx

Teaching with Technology (technology + pedagogy)

The Microsoft Teaching with Technology Online Learning curriculum helps educators move beyond learning technology tools to develop a deeper understanding of how technology integration can enhance the teaching and learning experience, enable 21st century skill acquisition in students, and save them time. Teaching with Technology offers a self-assessment to identify learning gaps, 36 hours of eLearning content, summative assessments, a range of consolidation learning activities and tutorials as well as an optional valid and reliable assessment of educator competencies via the Microsoft Certified Educator Exam. Explore Teaching with Technology.

Digital Literacy/Productivity Application Specialist

- This curriculum, available online or offline, helps educators develop a fundamental understanding of computers and productivity software. The courses help them learn the essential skills to begin computing with confidence. The **Standard curriculum** features five courses that cover computer basics; using the internet and productivity programs; security and privacy; and digital lifestyles. These five courses are available in three versions that use examples and screenshots from different versions of Windows and Microsoft Office. The **Advanced curriculum** features four courses that cover creating an e-mail account, creating a great resume, searching for content on the World Wide Web and social networking. This program is offered online or offline and can be administered across the state. This program allows for individuals who may be new to using technology and the internet.

Partners in Learning Network www.pil-network.com

Microsoft is working to bring technology skills and its benefits to all. We share the ultimate goal of all stakeholders—use technology to help improve education and the learning experience, create opportunity, and raise living standards for people around the world.

The potential of education being the equalizer of social disparity might never be greater – economic imperatives and demographic realities make change more necessary, and technology makes change more accessible and scalable.
Given an overall market size of approximately 4M institutions, 77M educators, and 1.4B

students, the international ICT (Information Communication Technology) standards which prepare K-12 students for greater success in their professional careers has resulted in an increased global focus on education, a top prioritization by Microsoft, and competitive pressure in the education market.

To this end, Microsoft's Partners in Learning is a global initiative with the objective of improving learning experiences through ICT and to help teachers and school leaders enable students to build 21st century skills. The Partners in Learning Network (PiLN) serves as the focal point for Partners in Learning; it is the public face, it creates the first impression for most educators and school leaders when engaging with Microsoft in education, and it helps connect the dots of the programmatic offerings for Microsoft.

In order to create the foundation needed to effectively engage and help educators build capacity by incorporating ICT skills into their teaching and learning practices the PiLN has evolved into a more agile, flexible, and reliable cloud-based architecture which allows an ability to better serve our audience by reacting quicker to user feedback, proactively pushing feature enhancements, and the return on the investment for our customer.

The newly revamped network will drive value for educators and school leaders by focusing on three fundamental themes:

1. Enable educators to find resources that can be immediately used in the classroom, such as: access to software, tools, lesson plans, and other user-generated content.
2. Provide an opportunity to connect and collaborate with other educators, school leaders, and their classrooms by building global communities of innovating teaching practices.
3. Support educators and school leaders in acquiring the skills needed to use ICT teaching and learning practices through a meaningful set of professional development content and curriculum.

We believe the Partners in Learning Network is well positioned to meet the professional development needs of the participating states' educators and is a robust online solution which can easily scale to supporting educators and schools state wide.

The PiLN will serve as the primary vehicle for supporting NASPO MSLTI Participant States' educator and school leader audience and will be the online engine used to serve this community by providing value on five key elements:

1 **Better Access to Microsoft Technology—**Microsoft has a wide array of products for educators to incorporate into their learning activities for students; the PiLN has consolidated over 30 free education relevant products and will make them available for NASPO MSLTI Participant States' educators.

2 **Support Innovative Approaches to Integrating Technologies in the Classroom—**The PiLN will support teacher's efforts to harness the use of technology as an effective teaching and learning tool by providing access to product tutorials and user generated learning activities contextualized for the classroom.

3 **Helping Close the Professional Development Gap—**The support of competency-based professional development models via our Teaching with Technology curriculum for educators will address their professional development needs in helping understand how pedagogy and technology interoperate. This online curriculum is aligned to the global standards of the UNESCO ICT Competency Framework for Teachers.

4 **Offer Education Leaders the Tools to Envision Implement and Manage Change-** The PiLN provides access to self-assessment research system that helps educators and school leaders understand and measure innovative teaching practices that develop the 21st C skills students need via The Partners in Learning School Research.

5 **Creating Communities of Practice—**The PiLN serves as the backbone for enabling members to have a 'voice' on the Network, share best practices and connect with other 'like-minded' individuals. Private groups will be created to support the NASPO MSLTI Participant States' ability to communicate directly with their educators, post resources, and share news and announcements. Educators from the NASPO MSLTI Participant States will also have access to the global community of PiL members where communities of practice can be established on a world-wide basis.

Partners in Learning School Research – www.pilsr.com

Partners in Learning School Research is a free, online survey sent out by a school administrator to school leaders and teachers to gain their individual self-assessments of innovative teaching practices in their school and in their own classes. Everyone is encouraged to participate (it only takes fifteen minutes), and all responses are anonymous and confidential. Once the surveys have been taken, your school receives a data-driven, action-oriented report with concrete recommendations for how your school can develop and expand its innovative teaching and learning practices. The surveys can be used to measure progress by establishing a baseline of your school's current teaching practices using the initial survey results, and then conducting subsequent research every year thereafter to assess how those practices have evolved.

Subject Matter Experts

Professor Chris Dede
Harvard University

Full Professor, Harvard University

I am the Timothy E. Wirth Professor in Learning Technologies at Harvard's Graduate School of Education. From 2001-2004, I also served as Chair of the Learning & Teaching department in the School. My research interests span emerging technologies for learning, educational policy, and leadership in educational innovation. My funded research includes five grants from NSF and the Gates Foundation to design and study immersive simulations, transformed social interactions, and online professional development. I have served as a member of the National Academy of Sciences Committee on Foundations of Educational and Psychological Assessment, a member of the U.S. Department of Education's Expert Panel on Technology, an International Steering Committee member for the Second International Technology in Education Study, and a member of the 2010 National Educational Technology Plan Technical Working Group I co-edited two recently published volumes: *Scaling Up Success: Lessons Learned from Technology-based Educational Improvement,* and *Online Professional Development for Teachers: Emerging Models and Methods*. My latest book, *Digital Teaching Platforms*, will be published by Teachers College Press in 2012. In 2007, I was honored by Harvard University as an outstanding teacher, and in 2011 I was named a Fellow of the American Educational Research Association.

Professional Experience

2000-present:	Timothy E. Wirth Professor in Learning Technologies, Harvard University
1991-2000:	Full Professor, George Mason University
1996-1997:	Senior Program Director, National Science Foundation (on leave from GMU)
1981-1990:	Full Professor, University of Houston—Clear Lake
1984-1990:	Visiting Scientist, Johnson Space Center, NASA
1984:	Visiting Scientist, Computer Science Lab, MIT (Sabbatical)
1979-80:	Policy Fellow, Office of the Director, National Institute of Education (via the Institute for Educational Leadership)

1974-81: Associate and Assistant Professor, UH—Clear Lake

1972-74: Assistant Professor, University of Massachusetts

Education Ed.D. University of Massachusetts, 1972
science education
B.S. California Institute of Technology, 1969
double major: chemistry and English

Representative Government Activities

National Academy of Sciences

invited Paper and Talk, Workshop on Games and Simulations in Science Education

co-chair, Committee on Enhancing Professional Development for Teachers: Potential Uses of Information Technology; Workshop on Online Teacher Professional Development

member, Committee on Psychological and Educational Foundations of Assessment

presenter, Workshop on the Roles of Information Technology in Improving Teaching and Learning in Undergraduate Science, Mathematics, Engineering, and Technology Education

Keynote, Board on Science Education Workshop on Information and Communications Technology Fluency

National Science Foundation

Served for one year (on sabbatical) as Senior Program Director in the National Science Foundation's Directorate of Education and Human Resources. Responsible for initiating and directing $25M funding program, "Research on Education, Policy, and Practice"

Member, Committee of Vistors, CAREER program

Participant, NSF Cyberlearning Workshop

Speaker, NSF/HER/REC Workshop on strategic planning for communication activities

Participant, Computer Research Association Cyberlearning Workshop on Modeling, Simulation, and Gaming Technologies Applied to Learning

Invited poster session, National Workshop on K-12 STEM Education (sponsored by NSF/NSA)

Panelist, NSF Centers for Learning & Teaching Reverse Site Visit 05

Chair, Committee of Visitors, ISE program

Invited talks to NSF program officers on scalability of educational innovations and on the relationship of 21st century skills initiatives to STEM

Invited plenary talks to NSF ITEST Principal Investigators Meeting 09

Board of Advisors, CADRE DRK-12 Technical Support Project

U.S. Congress

Testified to the Science Committee, U.S. House of Representatives, May, 2001

Testified to the Congressional Web-based Education Commission, June, 2000

U.S. Department of Education

Technical Working Group, Evidence of Effectiveness Initiative

Briefing on Educational Technology, Secretary Duncan's Leadership Team

Technical Working Group, National Education Technology Plan 2009

Invited Panelist, US. Dept of Education Policy Briefing on Technology

Organizer, Workshop on Reinventing High Schools for the 21st Century

Member, Technology Expert Panel

Advisory Board, Designing a National Study of the Effectiveness of Educational Technology

Advisory Board, Ready to Learn Television program

U.S. Department of Defense

Expert Panelist on the comprehensive technology plan for the Department of Defense Education Activities

Invited Keynote, Educational Simulations and Serious Games Symposium, Defense Intelligence Analysis Center

U.S. Agency for International Development

Expert Panelist on designing and studying applications of educational technology for developing countries

Massachusetts State Government

Member, Task Force on 21st Century Skills

Testimony, Special Committee on Educational Technology

Representative Corporate Activities

Wireless Generation: Consulting

The Capital Group: Invited briefing

Intel: External Research Advisory Committee

Qualcomm: Co-Chair Wireless EdTech Conference 2010, 2011; consultant

ETS: Standing Committee, NAEP Technology and Engineering Literacy Assessment

Lenovo: Advisory Board, Education Research Initiative

Sony: Invited presentation to Executive Advisory Board

Pearson: workshop on instructional design

Laureate: presenter, consultant

aal: Keynote, Users Conference

Mitre: Presenter, Interagency Distance Learning Advisory Council

Microsoft: Advisor for the U.S. Partners in Learning Mid-Tier Grant Program

Dell: Speaker at Superintendents Forum

IBM: Consultant on New Models of Management Education;
Invited Talk at IBM Research Center: Education Group

Education Networks of America

Punya Mishra, Ph.D.

Professor & Director Masters Program in Educational Technology
Department of Counseling, Educational Psychology & Special Education
College of Education, Michigan State University

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College of Education
Michigan State University
East Lansing MI, 48824

punya@msu.edu
Phone: 517.353.7211
Web: punyamishra.com
Fax: 517.353.6393

Dr. Punya Mishra is professor of *Educational Technology & Educational Psychology* at *Michigan State University* where he directs the *Master of Arts in Educational Technology,* Program. He is former chair of the *Innovation and Technology Committee* of the *American Association of Colleges of Teacher Education*, as well as co-chair of the 2011 annual conference of the *Society of Information Technology in Teacher Education*. He has an undergraduate degree in Electrical Engineering (from *Birla Institute of Technology & Science*, Pilani), Masters degrees in *Visual Communication* (from the Industrial Design Center, *Indian Institute of Technology*, Mumbai), and Mass Communications (from *Miami University*, Oxford Ohio), and a Ph.D. in Educational Psychology (from the *University of Illinois at Urbana-Champaign*).

His research has focused on the role of technology in teaching, teacher knowledge, creativity and design. The *Technological Pedagogical Content Knowledge (TPACK) Framework* for teacher knowledge for technology integration (co-developed with Dr. Matthew J. Koehler), has been described as being "the most significant advancement in the area of technology integration in the past 25 years." He has received around $5 million in grants from national and international agencies. He has published over 30 peer-reviewed research journals and book chapters, and has edited two books.

Dr. Mishra teaches courses at both the masters and doctoral levels at the *College of Education* in the area of educational technology, design, media. He has also taught courses and conducted workshops on creativity, innovation and design for the MBA program at the *Indian School of Business* (Hyderabad) as well as the Executive MBA program at the *Broad School of Business*, Michigan State University. Dr. Mishra has received many accolades for his teaching, including a *Lilly Faculty Fellowship* (2001), the *MSU Teacher Scholar Award* (2004), the College of Education's *Teaching Excellence Award* (2006), and the *AT&T-MSU award for Instructional Technology* (2008).

Dr. Mishra is also an accomplished visual artist and poet. His work has been featured in international design and puzzle magazines and websites. You can find out more about him by going to http://punyamishra.com/

Education

1998: *Ph.D. in Educational Psychology*
University of Illinois at Urbana-Champaign

1992: *Master of Arts in Mass Communication*
Miami University, Oxford OH
GPA : 4.0/4.0

1990: *Master of Design: Visual Communication*
Industrial Design Center, Indian Institute of Technology, Bombay

1998: *Bachelor of Engineering: Electrical & Electronics Engineering*
Birla Institute of Technology & Science, Pilani

PROFESSIONAL EXPERIENCE

Faculty

2010- Professor, Technology & Education
College of Education, Michigan State University

2005-10 Associate Professor, Technology & Education
College of Education, Michigan State University

1998-05 Assistant Professor, Technology and Education
College of Education, Michigan State University

1990-91 Instructor, Masters program in Visual Communications
Industrial Design Center, Indian Institute of Technology, Bombay

KEY PUBLICATIONS

Books

Mishra, P. (1990) *A 2 Z: A dictionary of design*. Published by The Industrial Design Center Press: Bombay, India

Mishra, P., Koehler, M.J., & Zhao, Y. (Eds.) (2007). *Faculty development by design: Integrating technology in higher education*. Information Age Publishing, Greenwich, CT.

Select list of journal articles

Mishra, P., Spiro, R. J. & Feltovich, P. (1996) Technology, representation & cognition. In von Oostendorp, H. (Ed.) *Cognitive aspects of electronic text processing*. (pp. 287-306). Norwood, NJ: Ablex Publishing Corporation.

Mishra, P. (1999/2004). The role of abstraction in scientific illustration: Implications for pedagogy. *Journal of Visual Literacy*. 19(2), 139-158. To be reprinted in C. Handa (Ed.). *Visual rhetoric in a digital world: A critical sourcebook*. (pp. 177-194). Boston, MA: Bedford/St. Martin's Press.

Mishra, P., Yong, Z., & Tan, S. (1999). From concept to software: Developing a framework for understanding the process of software design. *Journal of Computing in Education*. 32(3). 220-238.

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Mishra, P., Hershey, K. (2004). Etiquette and the design of educational technology. *Communications of the ACM*, 47(4), 45-49.

Koehler, M. J. & Mishra, P. (2005). What happens when teachers design educational technology? The development of Technological Pedagogical Content Knowledge. *Journal of Educational Computing Research*. 32(2), 131-152.

Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A new framework for teacher knowledge. *Teachers College Record* 108 (6), 1017-1054.

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Mishra, P., & Yadav, A. (2006). Using hypermedia for learning complex concepts in chemistry: A qualitative study on the relationship between prior knowledge, beliefs and motivation. *Education and Information Technologies*. 11(1), 33-69.

Heeter, C., Egidio, R., Mishra, P., Winn, B., & Winn, J. (2008). Alien Games: Do girls prefer games designed by girls? *Games & Culture Journal*. (4)1. p. 74-100.

Harris, J., Mishra, P., & Koehler, M.J. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration reframed. *Journal of Research on Technology in Education*, 41(4).

Mishra, P. & Koehler. M. J. (2009). Too cool for school? No way! Using the TPACK framework: You can have your hot tools and teach with them, too. *Learning & Leading with Technology*, 36(7), 14-18.

Mishra, P., Koehler, M. J., & Kereluik, K. (2009). The song remains the same: Looking Back to the Future of Educational Technology. *TechTrends*, 53(5). p. 48-53.

Mishra, P., Koehler, M.J., & Henriksen, D (2011). The seven trans-disciplinary habits of mind: Extending the TPACK framework towards 21st century learning. *Educational Technology*.

Koehler, M. J., Mishra, P., Bouck, E., DeSchryver, M., Kereluik, K., Shin, T. S., & Wolf, L. G. (2011). Deep-play: Developing TPACK for 21st century teachers. *International Journal of Learning Technology*, 6(2), 146-163.

Voogt, J., Estrad, O., Dede, C., Mishra, P. (2012). Challenges for learning and schooling in the 21st Century. *Journal of Computer Assisted Learning*.

Mishra, P. & the Deep-Play Research Group (2012). Crayons are the future: Rethinking Technology & Creativity in the 21st Century. *Tech Trends, 56*(5), 13-16.

Mishra, P., Henriksen, D. & the Deep-Play Research Group (2012). On Being *In*-Disciplined. *Tech Trends. 56*(6), 18-21.

Mishra, P., Terry, C., Henriksen, D. & the Deep-Play Research Group (in press). Square peg, round hole, good engineering. *Tech Trends.*

Mishra, P., Fahnoe, C., Henriksen, D. & the Deep-Play Research Group (in press). Creativity, self-directed learning and the architecture of technology rich environments. *Tech Trends.*

Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. (in press). Technological pedagogical content knowledge. In M. Specter et al. (Eds.), *Handbook of Research on Educational Communications and Technology.*

FUNDED GRANTS

2010-13 Supporting teacher preparation and university development for the 21st Century: A collaborative partnership between Azim Premji Foundation and Michigan State University. *Azim Premji Foundation*. PI Punya Mishra. $400,000.

2010-11 The creativity initiative at Michigan State University. *Office of the Vice President of Research, Michigan State University.* PI Mark Sullivan, Dean Rehberger, Punya Mishra, and others. $80,000.

2009 Exploiting serious games to build system thinking skills for achieving globalization literacy. *ISE Global Competency Initiative, Office of the Provost, Michigan State University*. With Co-PI's Ron Rosenberg & Brian Winn $11,000.

2008-09 *Research and evaluation of the design based engineering curriculum*. Intramural Research Grant Program, Co-PI's Neeraj Buch & Matthew J. Koehler $60,000.

2004-06 *Reaching and educating at risk children in India.* In collaboration with the American Institutes of Research, Juarez Associates and World Learning. Funded by the U.S. Agency for International Development. $500,000

2003-06 *Does Involving Girls as Designers Result in Girl-Friendly Science Education Software? Comparing processes and outcomes of same-sex 5th and 8th grade girl and boy design teams.* Proposal to the National Science Foundation. With Co-PIs Rhonda Egidio and Carrie Heeter. $640,000.

2003-06 *Teachers as designers: A problem-based approach to preparing teachers.* US Department of Education. PI with Yong Zhao, Matthew Koehler & Cheryl Rosean. $1,500,000.

2001-03 *Perceived intelligence and the design of computer interfaces.* Intramural Research Grant Program, $50,000.

2000-03 *Communities of designers: A comprehensive project-based approach to preparing tomorrow's teachers to use technology*. US Department of Education, PI with Yong Zhao, $1,419,552.

2000-03 *Bringing Attribution Theory to Educational Technology: Developing a new research agenda*. Proposal submitted to the Joe L. Byers & Lucy Bates-Byers Endowment. $60,000

Languages

Fluent in English, Hindi & Oriya (spoken)

Personal Interests

Visual wordplay, writing palindromic & children's poetry
Graphic design, typography, 20th century literature

Professional Development on effective use of technology for 21st century learning with the Intel® Teach Program

Intel's flagship Corporate Social Responsibility program, ***Intel® Teach,*** helps K-12 teachers of all subjects to learn to integrate technology effectively into their existing curriculum, focusing on their students' problem solving, critical thinking, and collaboration which are precisely the 21st century skills required if students are to thrive in the high tech, networked society in which we live. This programs helps teachers learn how to engage their students through project-based approaches; guide their teaching through ongoing assessments; and encourage their students to be creators of knowledge. The research-based program offers practical meaningful support which has been proven to result in school improvement.

States or districts have two options for accessing and implementing the Intel Education programs. The first option is to apply for a free license to host the courses in their own environment to support their current Professional Development efforts. The second option is to pay a fee for facilitation support to support a variety of trainer scenarios such as train the trainer, online, blended learning or face-to-face.

Intel® Teach Elements:
These e-learning courses are designed to support a schools professional learning community. The content can support facilitated discussion and reflection on key educational topics that support effective use of technology in schools. These resources are free and available to any state or district wanting to implement the trainings regardless of what is purchased.

Intel Teach Elements Series	Just in time e-learning courses that provide educators with flexible professional development opportunities supporting integration of technology in schools	Courses and CDs are free online at: www.intel.com/education/elements
Project-Based Approaches	Helps teachers improve their understanding and application of Project-Based Approaches to engage students.	Syllabus
Assessment in 21st Century Classrooms	Allows educators to take an in-depth look at assessment that meets the needs of today's learners.	Syllabus
Collaboratio	Supports teachers in ensuring students have	Syllabus

n in the Digital Classroom	collaboration skills for the global economy.	
Educational Leadership in the 21st Century	Helping school and district leaders support teacher effectiveness to further improve student achievement.	Syllabus
Thinking Critically with Data	Enabling educators to prepare students with skills to think critically in our information-rich world.	Syllabus
Inquiry in the Science Classroom	Explains and demonstrates the inquiry process in depth with interactive activities and locally relevant classroom examples.	Syllabus
Designing Blended Learning	Helps teachers explore and transition to blended learning experiences by providing rationale, strategies, and suggest technology tools.	Syllabus

The Intel Teach Elements courses align well to the TPACK model. Actual skills and outcomes vary depending on the course selected by an educator and the modules completed. Below are some examples of outcomes that align to TPACK.

Technological Knowledge	Participants learn by creating their own action plans and lessons. Skill are dependent upon the activities that the educator selects but common Technical Skills include: Web based research; productivity applications; online collaboration tools, graphic organizers, and digital publishing tools
Pedagogical Knowledge	Integrate instruction on collaboration, self-direction, information literacy, and reflection throughout a project. Understand the purposes of assessment in a 21st Century Classroom, Create more meaningful student assessment that measures both skills and content knowledge, Examine method for using technology to draw data; Understand the importance of thinking critically about information in contemporary society.
Content Knowledge	Identify standards, 21st Century skills and learning objectives for project plans; understand scientific inquiry and what makes it unique from other approaches; review exemplary lesson ideas in core content areas

Intel® Education:
Free Tools and Resources to Help Students Develop 21st Century Skills
Our online tools create active learning environments where students can engage in discussions, analyze information, pursue investigations, and solve problems. You'll also find teaching resources, including lesson plans, assessment strategies, and technology-enriched project ideas for all K–12 subjects.

For a complete listing of all the Intel Tools for Student-Centered Learning visit:
http://www.intel.com/teachers

Intel® Transforming Learning – Train-the-Trainer
The Intel Transforming Learning with 1-1 Program helps teachers re-engineer practices to become proficient in a 1-1 e-learning environment. The course offerings in the ***Transforming Learning*** with 1-1 focus on several main themes:

- Designing instruction in a one-to-one classroom
- Exploring the range of use of technology tools to enhance teaching and learning
- Supporting effective classroom management strategies in one-to-one classroom
- Ensuring deep student engagement in the learning process
- Sustaining tech support within the schools
- Collaborating with colleagues to improve instruction through peer reviews of activities

The combination of the two aforementioned programs can create a sustained teacher professional development offering supporting schools for the first few years of their implementation of 1-1 learning.

Intel's professional development offerings were designed to support Educators deploying 1-1 eLearning in their schools. This series includes offerings for both teachers and administrators. The Intel Transforming Learning courses were designed by 1:1 experts at the Metiri Group to ensure the content addresses the most critical challenges that educators face in deploying 1-1 for the first time in their classrooms. The Program has two course offerings focused deeply on this

topic. Participants in these courses must have intermediate technology integration skills. Thus the Intel Teach courses are recommended as pre-requisites to educators not already possessing those vital skills.

Research shows the sustained professional development is one of the most critical elements for successful 1-1 e-learning deployment. The combination of face-to-face and eLearning courses included in both the Intel Teach and Transforming Learning with 1-1 courses were designed with this flexibility in mind. Courses can be taken in any order and are designed to engage educators with a broad range of capabilities. The e-learning courses can also be ordered on CD and installed on a teacher's local device affording the option to continue progress in their training even if they are not connected to the internet at that moment in time. Each e-learning course has self-assessment check points built into the content to allow reflection on their current skills and determine what they need to focus on next as they progress through the training.

All e-learning courses are designed for flexibility of implementation. They can be implemented in a fully face to face mode, an online mode or an educator can take them as self-study for just in time learning. The ideal scenario is that each school forms their own learning community-selecting the most important educational goals for their school and then work through the content at a pace that fits into their own needs and schedules. Having one coach or leader in every school also helps to ensure quality implementation and support in deployment of both the training and devices.

Intel Transforming Learning w/ 1-1 Course	Description	Delivery	Links for information
Learning with One to One	Helping educators design instruction in a one to one setting with curriculum mapping, creating activities using Web 2.0 tools and sustained technology support. *Audience: Educators new or inexperienced with a one to one teaching environment.*	This is a 24 hour face to face course.	Syllabus
Student Engagement with One to One	Participants explore characteristics of engaged learners' by taking advantage of the authentic, real-world tools in a one to one learning environment. *Audience: All educators in a one to one teaching environment.*	This is a 24 hour eLearning course, which can be implemented face to face,	Syllabus

		blended or online.	

The Intel Transforming Learning courses meet the TPACK model in similar ways to those listed above for Intel Teach Elements courses. However, access to ubiquitous computing environments in learning affords educators an opportunity to use the SAMR model to re-think and re-design their classrooms.

SAMR Design Principles	**Intel Transforming Learning Examples**
Redefinition	Ubiquitous technology allows educators to look across their curriculum to redesign their approaches to help students master the most challenging content in new ways- for example- student gaining global competency and math/science skills by working with large data bases of scientific information with other classrooms around the world.
Modification	Technology allows for significant task re-design such new approaches to classroom management, the role of students as 'experts'
Augmentation	Highlights how to augment current work: Online daily calendar to keep track of student requirements, Teacher creates electronic newsletter via email, blog etc. vs. printed in backpack more easily reaching parents/guardians.
Substitution	Highlight places where you substitute activities based on ubiquitous access to technology- e.g. less printing and going digital; teacher uses online form vs. worksheet etc.

All of the course offerings from Intel are designed to improve instruction while using technology as a foundation for improved learning. For an example of the type of learning that is showcased on our professional development offering see this link.

Intel has embarked on a long-term strategy, committing to the research, development, and continuous improvement of the series of professional development courses that nations and states worldwide can count on as relevant, current, and grounded in the latest research. Today, Intel works with ministries of education worldwide and State Departments of Education in the U.S. to position the high-quality

Surveys in 13 countries indicate that 93.9% of the teachers who take the **Intel® Teach** course realign their teaching to focus more on problem solving, critical thinking, and collaboration through technology

offerings from **Intel® Teach** to support the individual educational goals of the respective countries. **Intel® Teach** has reached over 10 million educators in 10 years in 70 countries around the world, with over 400,000 in the U.S.

Third party evaluation is key to Intel Teach program success [1]

Intel Teach is regularly, independently evaluated and consistently ranks among the most effective programs of its kind in existence. The program has high success rates across three indicators in countries at multiple levels of economic development:

- Increased use of technology activities with students
- Increased use of technology for lesson planning and preparation
- Increased use of teaching with projects

1 Independent evaluations by third parties are available at:
www.intel.com/education/evidenceofimpact

The research says Sustained, targeted professional development of 30-100 hours over a period of 6 months to one year can yield significant improvements in achievement for the average student (i.e., gains of 21 percentile improvements).[2]	Intel offers a series of professional development opportunities with longer (32+ hours) and shorter (approximately 20 hours) options, delivered face-to-face or online, supported by an online community of practice.
The research says teachers learn best when their professional development provides five key opportunities: 1) content focus, 2) follow-up, 3) active learning, 4) feedback, and 5) collaborative examination of student work.	Intel teacher professional development has been designed to include all five opportunities for teachers.
The research says there are generally three outcomes for professional development that happen in the following order: 1) changes in teachers' beliefs and attitudes, 2) changes in teachers' classroom practices, and 3) changes in student learning outcomes.[3] Reaching the last two stages requires continued support from school leaders as teachers begin to translate the shift in practice.	Intel courses are designed to effect changes in classroom practice, from which changes in student learning and changes in teachers' attitudes and beliefs follow. Intel often partners with the local education agencies in bringing these professional opportunities into the region. This serves to advance systemic support for the teachers, and provides a platform for common teacher experiences.

[2] Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the evidence on how teacher professional development affects student achievement (issues & answers report, rel

For additional support visit the Implementation & Facilitation Toolkit - http://engage.intel.com/groups/intel-teach-elements-implementation-toolkit

Intel Teach Elements and Intel Education Transforming Learning with One to One Series
All courses listed above are available starting in January of 2013.

Intel Teachers Engage Community - Ongoing Professional Development and Classroom Ideas Available to all educators on an ongoing basis. Participation is available to educators today. Email communication can be shared and targeted to get participants to sign-up and be involved. Once a community member updates are shared.

The Teachers Engage community is a vibrant global online network of educators dedicated to educational improvement. This free site supports the core concepts such as: effective use of technology, instructional design, project-based approaches, assessment of 21st century skills, and open-ended questioning. Participant responses to evaluation of site show that they join for many reasons including:

- Learning about Web 2.0 tools and how to effectively use them in the classroom
- Networking with over 20K educators from more than 80 countries
- Staying informed on ed tech policies and trends
- Engaging in community activities
- Participating in free Webinars or host one of your own for the community
- Access to all your Intel Teach training resources in one location
- Receive tips, tricks, and strategies for effective trainings
- Creating private group to support Intel trainings (blogs, collaborative work space, wikis)
- Getting training updates and providing feedback to the Intel Education team
- Sharing stories of results with other inspiring educators

"The Engage Community is my one stop shop for online, anywhere, anytime learning. It is a goldmine filled with technology gems to assist my personal and professional learning and collaborative efforts with educators from all over the world. It is also my information hub to share new ideas, gain new insights and pose critical thinking questions in an online, safe and

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2007–no. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest.

[3] Guskey, T. R. (2002). Does it make a difference? Evaluating professional development. *Educational leadership, 59*(6), 45-51.

moderated community, while supporting my technology and 21st century skills integrations efforts."
Naomi Harms, Technology Literacy Consultant, Wisconsin

Teachers Engage Webinars
The Teachers Engage Community provides free webinars and follow-up discussions and interactions for all community members on current educational and technological topics. All sessions are recorded for viewing at a later time.

> **Intel Teach Live:** Hosted by classroom teachers on sharing best practices and uses of various applications, software, tools etc. Topics in 2012 included; student writing and publishing, gaming in the classroom, digital storytelling, digital citizenship and online safety, QR codes and a focus on technology application with the primary students.
>
> **Virtual Museum Field Trips:** Hosted by a New York educator and takes a look at planning and utilizing museum resources virtually. Museums visited in 2012 include the Baseball Hall of Fame, New York Public Library, The Metropolitan Museum of Art, Museum of Modern Art Newark Museum.

For the most current information and registration visit:
http://engage.intel.com/community/teachersengage/webinars_and_events/

Additional Intel Education Resources
In addition to our professional development courses, Intel has several free resources online which can support both students and teachers with digital literacy skills. For example, our technology literacy site was developed in conjunction with Chicago Public Schools providing middle school curriculum to help content teachers effectively embed technology activities into their courses in alignment with ISTE Net-S standards. Intel also has the Education *Help Guide* which provides step-by-step instructions for hundreds of productivity tasks designed in user-friendly, non-technical language. Visual images accompany each step demonstrating how it's done. This tool is also available to support English Language learners with step by step instruction in their native languages of Arabic, Chinese, Portuguese, Russian, Spanish and Vietnamese. Each of these guides can be viewed online or in a downloaded client end application.

For a complete listing of all the Intel Tools for Student-Centered Learning visit:
http://www.intel.com/teachers

Using Technology with Classroom Instruction that Works – For Mentor Educators

In order to support the DOE as they address the challenges of implementing the MLTI 1:1 program, we propose research-based and targeted professional development on both technology integration and quality instructional strategies. We understand that the foundation to effective integration of technology into instruction is first understanding what constitutes "best practice" in teaching so that teachers gain the teaching and management skills necessary to maximize student achievement. Our professional development is based on McREL's *Classroom Instruction that Works, 2nd ed.* and *Using Technology with Classroom Instruction that Works, 2nd ed.* Both of these best-selling ASCD publications are built on the foundation of more than 40 years of research that define the instructional strategies that maximize student achievement. McREL has demonstrated the ability to conduct large-scale professional development. Some examples include:

- The Tennessee Department of Education engaged McREL to provide technology integration professional development throughout the state in nine separate locations in the course of one summer.
- McREL is currently providing leadership professional development for the United States Department of Defense world wide.
- The State of Florida has engaged McREL to provide professional development to all of the statewide professional development providers.

The content of the McREL training clearly aligns with two components of the TPACK Model – Technological Knowledge and Pedagogical Knowledge. McREL's technology integration philosophy is framed by the ACOT model which identified a path teachers travel on as they transition from entry to adoption to adaptation to appropriation, and finally to invention. This parallels the SAMR Model which provides educators with a learning pathway from substitution through redefinition.

We will address the MLTI RFP in the following ways:

- Our technology integration work defined below will address the concern about heterogeneous skills among educators by first providing them will a common language for instruction and they clearly defining the role of technology in the instructional process and providing easy to use, free resources.
- A focus of our technology integration is to help educators access and use tools that allow for a greater range of differentiation in the classroom with a focus on meeting student needs and interests as they address the Common Core and State curriculum.

- We understand that before a teacher can appropriately integrate technology into their instruction, they must first have a working understanding how to implement best practice as identified by educational research in their classroom. The McREL Instructional Planning Framework is a research-based model that provides educators clear guidance on how and when to use instructional strategies that will most impact student achievement.
- Training will be face-to-face professional development. We will also provide a Google site that will serve as an asynchronous enhancement for the face-to-face work.

McREL will provide a two-day face-to-face workshop based on *Using Technology with Classroom Instruction that Works* (UTCITW). These sessions can be differentiated into five versions and will be delivered for groups of between 20 and 40 participants. There is a recommended third day of training that can be scheduled in the fall semester giving teachers time to implement the content of the first two days of instruction and bring questions to the McREL facilitator for clarification. The focus of the workshop is to:

- Provide teachers with a clear understanding of what research indicates is best practice in the classroom
- Provide tools, apps, and websites that will allow teachers to use the technology provided in the grant to reshape the way they teach
- Increase their ability to create a student-centered environment in the classroom
- Develop teaching and management skills needed to leverage technology skills.

More detail on the UTCITW workshop follows:

Teacher Workshops – Using Technology with Classroom Instruction that Works

(20 - 40 participants per day, per professional developer)

McREL professional developers facilitate a Using Technology with Classroom Instruction that Works workshop based on the Instructional Planning Framework defined in *Using Technology with Classroom Instruction that Works.* In addition McREL will provide asynchronous resources to support teachers as they begin to work with the strategies and technology introduced in the face-to-face session. Each session will include approximately 6 hours of actual instruction and interaction. There will also be a morning and afternoon break and a 30-45 minute lunch break. Sessions will be scheduled in collaboration with the State. Each McREL facilitator will work with between 20 and 40 people in the hands-on sessions. Participants will be expected to have a web-capable devise and the facility will have adequate wireless access to support the total number of participants at that location.

The training materials consist of a custom designed Google site with all necessary information including content as well as all referenced websites. This Google site will be available both during the workshop and throughout the school year.

- Day one includes a brief overview of the research on best practice in teaching, technology tools, and Component One of the McREL Instructional Planning Framework – Creating an Environment for Learning.

- Day two focuses on Component Two of the McREL Instructional Planning Framework – Helping Students Develop Understanding.

- Day three focuses on Component Three of the McREL Instruction Planning Framework – Helping Students Extend and Apply Knowledge.

The content of these sessions can be specified from the following five options:

1. UTCITW for Beginning Technology Integrators at the Elementary Level
2. UTCITW for Intermediate Technology Integrators at the Elementary Level
3. UTCITW for Advanced Technology Integrators at the Elementary Level
4. UTCITW for Mathematics and Science Teaching at the Secondary Level
5. UTCITW for Language Arts and Social Studies Teaching at the Secondary Level

Consultants

McREL consultants are recognized experts in the field of leadership development and educational technology. Example bios of McREL consultants qualified to do this work include, but are not limited to, the following:

Howard Pitler, Ed.D.**,** joined Mid-continent Research for Education and Learning (McREL) as Director of Educational Technology in 2003 and is currently the Chief Program Officer. He is the principle author of *Using Technology with Classroom Instruction that Works, 2nd ed.*(ASCD, 2012)*, The Handbook for Classroom Instruction that Works, 2nd ed* (ASCD, 2012)*,* and co-author of *Classroom Instruction that Works, 2nd ed.*(ASCD, 2012. He is also the developer of McREL's Power Walkthrough informal observation software, and has written numerous articles on the topic of educational technology. Dr. Pitler has been invited to present at education conferences internationally and has worked with schools, districts, and state agencies in hundreds of school districts.

Prior to joining McREL, Pitler served as both an elementary and middle school principal for Wichita Public Schools, USD 259. While he was principal of L'Ouverture Computer Technology Magnet Elementary, that school was named an Apple Distinguished Program and listed as one of the Top 100 Schools in America by Redbook Magazine. He also served as an adjunct instructor on the staff of the Wichita State University's master of educational administration program.

Dr. Pitler has been active in technology education and leadership development for more than 30 years. He has consulted with schools and districts throughout the United States, and was named an Apple Distinguished Educator, Smithsonian Laureate, and National Distinguished Principal. Dr. Pitler earned a B.S. degree in Music Education from Indiana State University, and a MM In

Music Performance, and an Ed.S and Ed.D in Educational Administration from Wichita State University.

Matt Kuhn, Ph.D.**,** Principal Consultant at McREL, has experience coaching principals and teachers and conducting educator professional development and technical assistance in instructional technology, technology leadership, STEM, guaranteed and viable curriculum, classroom observation, and data-driven decision-making. He also writes curriculum modules for online classes, conducts technology audits for districts, and trains school and district leaders in using Power Walkthrough software. He has been published in several journals including Principal and Learning & Leading with Technology and is co-author of *Using Technology with Classroom Instruction that Works* 1st & 2nd editions (ASCD, 2007 and 2012) and *What We Know About Mathematics Teaching and Learning 3rd Ed*. (McREL 2010). He is also a lead blogger on McREL's Blog at http://mcrel.typepad.com.

Before coming to McREL in 2005 he worked in national laboratory technology outreach and was a science and mathematics teacher in grades 6-12. He is also a former K-8 school principal. He has a B.S. in Aircraft Engineering Technology (Embry Riddle Aeronautical University), M.A. in Science Education (University of Denver), and a Ph.D. in Educational Technology Administration (University of Denver).

Mr. Kuhn is a Google Certified Teacher and a member of the International Society for Technology in Education, National Science Teachers Association, and the Association for Supervision and Curriculum Development. He is also an active member of the Steering Committee of the Colorado Science Educator's Network (CSEN).

6 Balanced Leadership for Technology Initiatives and managing Leadership Professional Development (HP)

7

In order to support the Department as they work to address the challenge in implementing the Maine 1:1 program, we propose research-based and targeted professional development for leaders that addresses the research-based leadership responsibilities needed to:

- help leaders manage the changes inherent in implementing new instructional technologies
- develop purposeful communities adept at using both tangible and intangible assets needed to effectively meet stated outcomes, and
- stay focused on the use of technology as a transformative tool for instruction.

We understand that the effective leadership is essential for the effective integration of technology into instruction. Thus, in order to strengthen and build capacity of educational leaders, including principals, superintendents, curriculum coordinators, technology directors, and other key personnel, McREL is proposing a Balanced Leadership for Technology professional development. Our professional development is based on McREL's seminal meta-analysis which identified leadership responsibilities significantly correlate to higher student achievement. This research is

reported in *School Leadership That Works (ASCD, 2005)* and *The Balanced Leadership Framework; Connecting Vision with Action* (McREL, 2006)

Balanced Leadership for Technology Initiatives: An Overview (2days)
(20 - 40 participants per day, per professional developer)

This session focuses on six major research findings from McREL's meta- and factor-analyses on principal leadership. It also includes an introduction to the concept of shared leadership, balanced leadership, and the Balanced Leadership Framework® within the context of leading major instructional technology initiatives. The professional development session is driven by both best practices in school leadership and by best practices in instructional technology implementation and aligns with two components of the TPACK Model – Technological Knowledge and Pedagogical Knowledge.

This session will help participants develop

- *Understanding* of McREL's research on principal leadership, correlating leadership responsibilities with student achievement
- *Knowledge* and skills for improving technology leadership practices
- *Awareness* of the degree to which individual participants fulfill research-based leadership responsibilities
- *Understanding technology as a transformative tool*
- *Understanding of the needs of digital natives*
- *Understanding that instructional technology implementation will be a second-order change for a number of staff members*

Balanced Leadership School-level Responsibilities: Affirmation, Change agent, Communication, Contingent rewards, Culture, Discipline, Flexibility, Focus, Ideals/beliefs, Input, Intellectual stimulation, Involvement in curriculum, instruction and assessment, Knowledge of curriculum, instruction and assessment, Monitor/evaluate, Optimize, Order, Outreach, Relationships, Resources, Situational awareness, Visibility

Methodologies: Workshop, print materials, community building, graphic organizers, knowledge taxonomy, guided reflection, group discussions, scenario analysis, conversation protocol, mapping of leadership responsibilities, card sort, change planning, leadership action plan.

-
- *Readings:*

1. *The Balanced Leadership Framework: Connecting vision with action* (McREL, 2007). The price of this booklet is included in the price of the Consortium.
2. *Using Technology with Classroom Instruction that Works* (ASCD, 2012).

Optional Session: Managing Change (2 days)

For leaders who opt for an additional two-day session, McREL is proposing our Managing Change session which increases participants' knowledge about change and effective technological change leadership and helps leaders embrace changes related to integrating technology into their schools. *Managing Change* is based on McREL's findings that identified specific leadership responsibilities associated with first- and second-order change. Participants learn how to initiate, monitor, and lead change effectively by applying McREL's four phases of change: *Create Demand*, *Implement Change*, *Monitor and Evaluate Change*, and *Manage Personal Transitions*.

This session will help participants develop

- *Awareness* of change theory and McREL's view of change
- *Knowledge* and *use* of technology tools and activities for effectively leading change
- *Knowledge* of research-based leadership responsibilities associated with leading change, especially instructional technology initiatives
- Knowledge about managing an instructional technology change initiative and which leadership responsibilities to emphasize when the change has second-order implications
- *Understanding* and dealing with the personal implications of a technology change for students, parents, and staff

Balanced Leadership Responsibilities – Change Agent, Flexibility, Ideals/beliefs, Intellectual stimulation, Knowledge of curriculum, instruction and assessment, Monitor/evaluate, Optimize

Session Methodologies: Workshop, print materials, community building, graphic organizers, knowledge taxonomy, guided reflection, group discussions, structured dialogues, strategic questioning, content jigsaw, scenario analysis, conversation protocol, assessment of research-based instructional strategies, assessing and planning for the magnitude of change.

Consultants

Experienced McREL consultants will conduct the professional development for these sessions. Session size should not exceed over 40 participants. McREL consultants are recognized experts in the field of leadership development and educational technology. Example bios of McREL consultants qualified to do this work include, but are not limited to, the following:

Matthew "Matt" Seebaum, Ed.D., *serves as a Principal Consultant and provides oversight for Balanced Leadership projects and the Balanced Leadership Developing Professional Developers (DPD) program. Much of his work is focused on helping school districts build the capacity to deliver leadership training for their principals internally, relying on the expertise of McREL for training trainers and providing ongoing quality assurance reviews for the trainers. Seebaum's other current projects include developing and delivering leadership professional development to aspiring, new, and experienced leaders in the Department of Defense Education Activity (DoDEA) schools world-wide; and serving as the lead facilitator for the implementation of the Balanced Leadership professional development intervention for an efficacy study funded by IES. He has served the New York State Education Department as an outside educational expert for external*

school audits and is well respected for his consultation work with clients throughout the United States, especially as it relates to integrating instruction and leadership. Seebaum has been instrumental as a product developer, consultant, and outside educational expert at McREL. His recent development work at McREL includes work on the "What Matters Most System Survey," an at-a-glance web-based system audit instrument that is currently available as a free online tool. Before coming to McREL, he served as a teacher and principal. Dr. Seebaum holds a B.A. in Elementary Education from the University of Wyoming, an M.A. in Educational Leadership from Texas Tech University, and an Ed.D. in Educational Leadership from Nova Southeastern University.

Matt Kuhn, Ph.D., *Principal Consultant at McREL, has experience coaching principals and teachers and conducting educator professional development and technical assistance in instructional technology, technology leadership, STEM, guaranteed and viable curriculum, classroom observation, and data-driven decision-making. He also writes curriculum modules for online classes, conducts technology audits for districts, and trains school and district leaders in using Power Walkthrough software. He has been published in several journals including Principal and Learning & Leading with Technology and is co-author of Using Technology with Classroom Instruction that Works 1st & 2nd editions (ASCD, 2007 and 2012) and What We Know About Mathematics Teaching and Learning 3rd Ed. (McREL 2010). He is also a lead blogger on McREL's Blog at http://mcrel.typepad.com.*
Before coming to McREL in 2005 he worked in national laboratory technology outreach and was a science and mathematics teacher in grades 6-12. He is also a former K-8 school principal. He is also a former K-8 school principal. He has a B.S. in Aircraft Engineering Technology (Embry Riddle Aeronautical University), M.A. in Science Education (University of Denver), and a Ph.D. in Educational Technology Administration (University of Denver).
Mr. Kuhn is a Google Certified Teacher and a member of the International Society for Technology in Education, National Science Teachers Association, and the Association for Supervision and Curriculum Development. He is also an active member of the Steering Committee of the Colorado Science Educator's Network (CSEN).

Professional Development, Curriculum Integration, and Consultation
Since its inception, Atomic Learning has been the Internet-based technology training solution of choice for nearly 27,000 schools, colleges and universities worldwide. In addition, millions of parents around the world are provided access to Atomic Learning resources through their students' school log in, furthering the mission to empower learners with technology.

The benefits of the Atomic Learning platform include:

- 24/7 access for faculty, staff, students and parents
- Ability to upload custom training content, created by your state, school, or district
- Reporting and tools to assign training and monitor progress
- Certificates of Completion to track training accomplishments
- Graduate credit options through academic partners
- State of the art implementation support

Atomic Learning solutions best suited for the Multi-State Learning Technology Initiative consist of:

- **Atomic Integrate:** Atomic Learning's signature solution providing training and integration on software applications.
- **Atomic Mobilize:** Provides professional development necessary to plan, implement, and revitalize successful initiatives that bring mobile technology and learning together.

Atomic Integrate

The Atomic Integrate solution offers a cost-effective professional development, technology integration and support resource that empowers educators to effectively utilize technology to positively impact student achievement. A recent research study shows students achieve 3% growth in math and reading when taught by teachers who utilize Atomic Learning for professional development and tech integration. The study found that students with teachers that utilized Atomic Learning's technology integration-focused professional development resources achieved 3% more growth in math and reading than those with teachers not using Atomic Learning resources. The 3% change is the equivalent to one year's growth. The full research study results may be viewed at http://al.atomiclearning.com/proveit.

From the "how-to" to "how-to-apply," Atomic Integrate includes training suited for beginners to advanced users. The training includes step-by-step assistance on how to save files in different

applications, if applicable (seems out of place here, maybe list as a bullet that is something like - show-and-tell tutorials that guide users through how to use technology - from understanding how to use a program to how to perform specific tasks such as saving files in different applications). Other professional development included with Atomic Integrate:

- Tech Integration Projects for seamless integration
- 21st century skills concepts training and projects
- Training Spotlights on highly-relevant ed tech topics such as Internet Safety
- Workshops on Facebook® for Educators, Avoiding Plagiarism, The Social & Interactive Web and more
- Training tutorials on 215+ software applications
- ISTE® NETS-based assessment to measure individuals' ability to apply technology
- The ability to search for projects by state academic standards, ISTE NETS standards, and the Common Core state standards.
- Option to earn graduate credit through academic partner

With Atomic Integrate, it's never been easier to train on new technology and encourage classroom integration. It's efficient, effective, affordable—and available to all faculty, staff, students and parents from school or home.

Atomic Mobilize

Mobile devices in the classroom have required educators, administrators, students, and parents to re-imagine what a 21st century classroom looks like. For districts with a mobile learning plan, Atomic Mobilize is a vital professional development tool. The solution provides a repository of online professional development resources and planning tools focusing on helping educators realize the full potential of mobile devices in the classroom.

Atomic Mobilize includes:

- Planning for Success
- Logistics
- Ensuring Effective PD
- Leading Change
- Classroom Management Strategies
- 5 Minutes to Success
- Success Stories
- Adapting a Lesson
- Additional Lesson Ideas & Training

With Atomic Mobilize, school leaders gain insight into what a mobile initiative can mean for a school or district and an understanding of what to know and plan for in advance from school leaders who have experienced this planning firsthand. Key topics include setting a vision, planning the infrastructure and gaining buy-in.

Most successful initiatives are fueled by strong planning and implementation, but rooted in inspiration. The Success Stories section within Atomic Mobilize shares key reflections from successful mobile programs to inspire school leaders and educators to embrace mobile learning as an important part of a contemporary education. Teaching strategies within the solution incorporate the TPACK model, Bloom's Taxonomy, and the SAMR model of learning.

Digital Literacy + Citizenship in Maine

Overview

Common Sense Media (www.commonsense.org) is the leading independent, non-profit organization dedicated to improving the lives of kids and families by providing the information, education, and independent voice they need to thrive in a world of media and technology.

Common Sense Media proposes to continue its highly successful state wide Digital Literacy and Citizenship program model we are currently implementing in Maine, where over 75% of schools are using our resources. Doing so will empower students throughout the state to think critically, behave safely, and participate responsibly in our digital world so that they can harness the full potential of technology for learning.

K-12 Digital Literacy + Citizenship Education Program

Our research-based, high-quality educational program includes the following resources:

Student Curriculum: *Series of 80 lessons and multimedia resources that empower students to think critically and make informed choices about how they live and treat others in today's digital world. Based on the research of Howard Gardner at the Harvard Graduate School of Education, this comprehensive K-12 curriculum covers topics ranging from Internet safety and security to privacy and cyberbullying, using engaging content to inspire kids to be responsible digital citizens.*

Common Sense 1:1 Essentials Program: *Common Sense Media's 1:1 Essentials Program will provide school administrators, teachers, and parents with a robust behavioral roadmap for rolling out a successful 1:1 student program. The program goals are threefold:*

(7) to offer a customizable, six-month game plan that would prepare a positive school community climate for 1:1 program implementation by teaching to building digital literacy and citizenship skills

(8) to provide guidance, advice, and actual resources to introduce, inform, and familiarize both educators and families with the changes that 1:1 devices bring to traditional classroom practices.

(9) *to provide the necessary, onboarding digital citizenship and literacy curricular resources that students need in order to make safe, responsible, and respectful choices with their new devices.*

Parent Education Program: *Comprehensive library of resources includes tip sheets, discussion guides, videos, and workshop presentations that schools can use to engage and educate parents on how to guide their kids to be media savvy and good digital citizens.*

Professional Development: *Onsite seminars and online tutorials and videos showcasing exemplary teachers provide educators straightforward information and best practices to easily integrate our resources into the classroom. Included are a series of videos entitled "Common Sense in the Common Core", which highlights models of successful integration of digital citizenship content into Common Core ELA classroom standards delivery.*

Learning Ratings for Educators: *Common Sense Media will partner with ELA and HP to provide Common Sense Media's learning ratings and reviews for Maine educators, students and parents. The reviews will help provide guidance to these important stakeholders on how as they search, choose and implement apps for learning in school or at home.*

Digital Literacy and Citizenship deliverables for Maine Laptop Initiative Bid:

• Upon registration, educators will receive free access to Common Sense Media's Digital Literacy & Citizenship curriculum resources, the Parent Media Education program, the 1:1 Essentials Program, and online professional development.

Common Sense Media offers this Digital Literacy and Citizenship Curriculum to help educators empower their students and their school communities to be safe, responsible, and savvy as they navigate this fast-paced digital world.

- **NO COST to your school.** It's all free upon registration thanks to generous support from our philanthropic supporters.
- **Research-based learning.** We created the lessons with the support of leading researchers from around the country.
- **Video-rich and real-world.** Students engage quickly and stay plugged in because you're using kid-tested media resources to teach the new media.
- **Total teaching flexibility.** Integrate the modular lessons with any subject in any order. Online and print materials let you teach in any classroom and send lessons home to engage parents.
- **Compliant and aligned.** The curriculum helps you comply with E-Rate's education requirement, and it's aligned to ISTE, AALS, and Common Core standards.
- **Cover Specific Topics with our Toolkits**. Our toolkits put all of the resources you need to teach students about cyberbullying, 1:1 Essentials, E-rate/CIPA compliance, and Gender & Digital Life at your fingertips. In each toolkit, you'll find lesson plans, activities,

videos, and parent outreach materials

- **Currently available for grades K-12.** 80 complete lessons covering internet safety, digital citizenship, and information and research literacy provide all of the materials required for implementation such as lesson plans, videos, worksheets, assessments, and a Parent Media Education program materials.
- **Get started with our Interactive Scope & Sequence.** Our interactive scope & sequence makes it easy to map out a digital citizenship lesson plan for your students. Click a topic to highlight the lessons that best suit your needs, or just browse by grade band. The cross-curricular units spiral to address digital literacy and citizenship topics in an age-appropriate way.

Learning Ratings for Educators link preloaded on each educator device

Common Sense Learning Ratings for Educators is a credible, unbiased tool for educators to discover, curate, use, and share the best digital media products for use in learning. In addition, Learning Ratings will help educators connect to other educators to share information on how they use digital learning products in the classroom. Currently, ratings and reviews are available now for more than 1000 mobile apps, games, and websites, with 2000 expected by the end of 2013. In addition to assessments of individual products, Common Sense's editors compile special recommendations by age, subject or Common Core skill to help teachers identify the products that best meet student's learning needs. For details on how we rate and review (including the subjects and skills in our content analysis and the rubric upon which we rate), please see http://www.commonsensemedia.org/about-us/our-mission/about-our-ratings.

The Common Sense Editorial Department assigns and develops the reviews and associated content. Resident within is a wealth of expertise and experience in evaluating the educational value of children's media. The editorial staff and reviewers include writers whose work has appeared in national and international publications, including CNN, USA Today, New York Times, Variety, CNBC, Washington Post, Parenting, the Globe and Mail, MSN; published book authors; a former manager of rating summaries at the ESRB; a nationally syndicated columnist; and authors or editors of well-regarded blogs. Also, most of us are parents; many have worked in the education and/or kid tech field; and several hold advanced degrees in technology in education, early childhood education, human development, and so forth. In addition, we draw on content or other education experts as needed. Combined, the core learning ratings team that is responsible for the ratings and reviews has deep expertise and several decades of experience in the digital media and learning arenas.

Cost: Free to teachers upon registration, available in August 2013

HP will provide technical training services to site support personnel responsible for installation/updating and troubleshooting the devices.

The **site support personnel training** session can be delivered as instructor led via the Internet or in a classroom setting. HP's response assumes a classroom setting for the interactivity and hands on for troubleshooting. This training session assumes the attendees have at least two years of experience troubleshooting Windows based devices and user knowledge of Windows 7 and Office 2010 (attending the webinars is an option). This training session will be up to two days in duration and is designed for the personnel responsible for set up, onsite troubleshooting and software updates. It will address common troubleshooting issues for the topics defined. It also includes the update framework for software updates and basic troubleshooting.

- Each session will be no more than two days in length
- Each session will be for up to a maximum of 15 attendees
- Attendees will have prior user experience/knowledge of Microsoft Windows 7 and Office 2010.
- Attendees will have at least 2 years Windows based PC set up, installation and troubleshooting skills and experience
- Training will be delivered instructor led in interactive and demonstration mode
- Attendees in Onsite sessions will be provided a student handout in the class
- The State will be responsible for securing and setting up the training rooms for each onsite session
- Each room needs to be equipped with at least 1 of each of the equipment types being taught and installed with the software being addressed in the training
- This course can also be delivered as instructor led via the web for remote sites. In these cases, the user assumptions for phone, bridge and internet access would apply.

Onsite training

Audience: Tech support
Duration: Up to 2 days
Topics include:

- Troubleshooting Windows 7
- Troubleshooting Office 2010
- Install and set up Elite Pad and HP4440

- Push updates process overview
- Installation/overview and troubleshooting tips for HP installed Software
- Overview of the support process

To ensure success, attendees should have prior Windows XP or Vista and Office 2003 or 2007 experience. Registration, notification and scheduling of attendees are the responsibility of the State. HP does not allow videotaping or taping of our sessions. Recorded versions are available upon request. Any instructor required travel will be billed at actual expense. Course updates are addressed separately.

ClassLink LaunchPad Professional Development

Professional Development is often cited as the critical element to a successful implementation of any worthwhile instructional or technology program. Investing in the right training resources that are available through multiple delivery modalities can extend and enhance your school's success.

Founded in 1998, ClassLink's mission is to empower educators to improve learning through innovative systems and services. We accomplish this mission through our products that are engineered to be simple to use yet empower student achievement and through our expert PD services.

LaunchPad Professional Development services are available through a multi-tier menu of options that includes onsite and remote instructor led curriculum. Select the options that suit your staff and help guarantee reaching your organizational goals.