



**NATIONAL LEADERSHIP INSTITUTE'S TOOLKIT 2005
INFRASTRUCTURE & TECHNOLOGY**

Components to Consider Regarding Statewide Networks

There are a number of key components to be considered for a statewide eLearning network. While not all of these elements are essential, each has important key benefits for constituent users and should be discussed and reviewed. Due to the financial commitment required to establish and manage a statewide network, buy-in from key partners is essential. The matrix includes examples of various critical network components, key considerations, and the benefits of each component found in many statewide eLearning networks.

Components To Consider For A Statewide Network		
Service/Function	Key Considerations	Benefit & Justification
Content		
	Does the state need to consider both state and local standards? Does there need to be uniformity? Do you need a user-friendly repository to house the content? Do you have quality assurance policies to manage the content in the repository?	One benefit is that a quality assurance process is in place and instructional staff is not all creating their own version of the same content; another benefit is a larger menu of quality content.

Components To Consider For A Statewide Network

Data		
State Educational Association (SEA)	What percentage of schools is connected? How is this data gathered?	Ease of data input and flow; ease of aggregation; the data needs to flow in both directions to meet NCLB requirements; real time opportunity for data analysis is critical.
No Child Left Behind Act of 2001 (NCLB)	Will all schools be able to drop in NCLB data into a state or region-wide management system?	See above
Email	How is email controlled at the state level? Local level? Is the bandwidth able to support the traffic?	Control of security within the email system (CIPA); statewide policies can be implemented; statewide email system could be more cost effective.
Federal	What are the federal data needs in addition to NCLB?	Measuring and reporting NCLB, AYP and Reading First easier via a statewide network.
Web Presence	Is the web presence state, regionally or locally controlled? What are the requirements?	Benefit of statewide control would be quality of service; lower cost; adherence to standard statewide policies.

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Video		
Video	Is video required in the state plan for networking?	Access; equity; cost; quality of service; capacity for streaming video; voice and voice over IP.
Video over IP (H.323)	Is there a cost saving over analog?	Quality of service; lower cost; network prioritization
Video Streaming	What are the bandwidth requirements? How much bandwidth will you allocate?	Quality enhancement for course work; training tool; benefit to asynchronous learning systems.
Video Conferencing	What are the bandwidth requirements? How much bandwidth will you allocate?	Travel cost saving; training tool; alternate delivery system for courses with low participation at single sites.
Voice		
Telephone service	What type of local and long distance services are needed? Review alternative providers for cost/benefit ratio.	Cost savings; single provider opportunity; easier to support.
VOIP	Is there additional equipment needs? What is the cost/benefit and quality of service?	Cost savings, single provider opportunity; easier to support; portability.

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Security		
Hardware	Are firewalls, VPN, routers, hubs, switches, desktops secure?	Common practices and policies to enforce and maintain.
Federal Regulations.	Can Federal Regulations be applied uniformly across the network?	Meet HIPPA, CIPA, FERPA requirements.
Software	Are there common software packages that are consistent throughout the state or is that a local decision?	Common network-run software packages can provide ease of use for the end user; easier training.
Virus	Are there firewall systems? Who manages them?	Single virus software to maintain.
Security Policy	Is the security policy managed at a state, region, or local level?	Common policies to adhere to and support.
Integrated Data Systems	What systems and what data need to be passed back and forth? Are common formats available for data transfer?	Common data standards
Acceptable Use Policy	Who is responsible for developing and enforcing the AUP? State/Regional/local agency?	Common AUP
Copyright	Does the state have a copyright officer? How is eLearning reviewed for copyright compliance?	Statewide network allows for centralized copyright compliance.

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Bandwidth		
Bandwidth	What are the bandwidth needs and expansion capacities for the state? Who will manage the system?	Design and monitor the network to ensure bandwidth adequacy and minimize bottlenecks.
Fiber	How much fiber is needed?	Unlimited bandwidth
Quality Assurance		
Network Management	How do we make sure the system reliability support the function intended?	Standardized network management protocols and policies.
System Support	Does the state provide helpdesk services for end users?	Common platform, lower support costs, more uptime.
Data shaping	How is data transfer prioritized?	Common set of policies and single sources control.
Review process	What is the plan for upgrading and keeping the network able to support the latest technologies?	Ensures continuance of entire network; equitable expansion.
Revenue Model		
	Where does the financing come from (e.g. legislature, grants, local agencies, partners)? Is the funding continuous? Is there a sustainable process to keep the network running and expanding?	Common model; single focus on meeting financial needs.

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Local Assets		
	Do local K-12 schools have an adequate technology emersion model for acquiring, implementing, and supporting eLearning?	Providing and supporting a rich technology emersion model for local schools to use that encompasses hardware, online content in key subject areas, assessment tools, professional development, helpdesk support; Ensures that maximum educational benefit will be derived from any statewide network.