

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC**

In the Matter of:)	
)	
Request for Review of the)	
Decision of the)	
Universal Service Administrator by)	
)	
Western Heights School District I-41)	File No. SLD-197613
Oklahoma City, OK)	
)	
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
)	
Changes to the Board of Directors of the)	CC Docket No. 97-21
National Exchange Carrier Association, Inc.)	

To: The Commission

**PETITION FOR REVIEW OF
ORDER OF WIRELINE COMPETITION BUREAU**

Pursuant to Section 1.106 of the Commission’s Rules (47 C.F.R. § 1.106), Western Heights School District I-41 (“Western Heights”), by its representative, hereby petitions the Commission to review the Order released January 15, 2003 by the Wireline Competition Bureau (“WCB”) in the above-captioned matter.¹

I. SUMMARY

Western Heights is a school district of approximately 3,100 students located on the western edge of Oklahoma City. Eighty-two percent of Western Heights’ students are eligible for a free or reduced price lunch. According to Bill Gates, Chairman of the Board of Microsoft, the small school district of Western Heights has created “perhaps the

¹ *Request for Review of the Decision of the Universal Service Administrator by Western Heights School District I-41*, CC Docket Nos. 96-45 and 97-21, Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc., Order, (WCB Rel. January 15, 2003), at para 6 and n.32. (“Order”) (attached hereto as Exhibit 1).

leading technology-driven curriculum in the country.”² The wealth and variety of benefits offered by the E-rate program has enabled Western Heights to roll out advanced, e-learning network services far more rapidly than it had ever thought imaginable, and in turn the students of Western Heights have received a wealth of opportunity.

Unfortunately, there are still too many school districts that do not spend their technology and telecommunications dollars wisely. Western Heights is not one of them. If there is a school district anywhere in the country that represents a blueprint for how to use E-rate dollars and advanced telecommunications services effectively to further learning, this is it.

This case is about a powerful web server system that is capable of serving up large amounts of video on demand via Internet browsers. This web server system is a significant part of an advanced networking process that will help Western Heights to enable a fully integrated K-12 e-learning environment. This case is also about a superintendent with a very clear vision of what the future of technology and education should look like and the energy and determination to see that vision through to fruition. Joe Kitchens is Western Heights’ superintendent, a nationally recognized leader in the field of K-12 educational technology.³ Mr. Kitchens and his staff work regularly with senior level executives and engineers from the country’s leading technology and educational consulting companies to fine tune and implement a shared vision of educational technology that will effectively serve the diverse educational needs of every one of Western Heights’ students. This vision requires a phenomenal amount of bandwidth and storage space to implement. It requires, among other things, full motion, full screen, on-demand instructional video. It requires web servers that have enough power and capacity to serve up potentially not Gigabytes, but Terabytes, of information.

In its Form 471, Western Heights requested E-rate discounts on the web server storage component of a web server system which, because of its size, consisted of

² See *Business @ the Speed of Thought*, Bill Gates, Warner Books, pp 388-391.

³ Mr. Kitchens was awarded the Consortium for School Networking’s 2001 Outstanding Achievement in Education Leadership Award; he leads the VISION project, a program designed, among other things, to replicate Western Heights’ success in other school districts and to promote a fully integrated technological approach to all aspects of K-12 education. See Exhibit 2 (2001 Award Winner: Joe Kitchens; VISION Committee Minutes Nov. 18, 2002; *Scholastic Administrator - Partnerships in the Digital Age* by Joe

separate components for processing and storage. The WCB did not take issue with the conditional eligibility of the system itself and each of its component parts, but rather, with Western Heights' alleged failure to show how it could possibly use that much server storage capacity entirely for eligible purposes.

The WCB pointed out correctly that the full storage component of the requested web server system had the capacity to store approximately 4.3 Terabytes of data. To the WCB, the notion of Western Heights using that much data "solely for eligible web service" was simply "implausible." Therefore, on procedural grounds related to burden of proof, the WCB rejected Western Heights' request. What the WCB failed to note, however, is that a single, one hour, full motion uncompressed video of an advanced algebra lesson, for example, takes up approximately 113 Gigabytes of storage space on a web server. In compressed form, it would take up about 4 Gigabytes. Add more lessons to the web server and the storage space essentially begins to melt away.

Each school day, Western Heights offers approximately 1,200 classes. It is easy to see how adding only a few hours of instructional video each day to the system, which has other eligible storage requirements as well, would need to have at least 4.3 Terabytes of storage capacity to accommodate that kind of demand for space and to operate properly. Contrary to the WCB's assertion, therefore, the notion that Western Heights could possibly use that much storage "solely for eligible web service" is anything but implausible.

As a matter of policy, the WCB may believe that the E-rate program should not support the purchase of very large, powerful, and expensive web servers, and perhaps in the context of the program as a whole, that makes sense. Certainly, if that is what the Commission at some point decides, no doubt applicants will make the necessary adjustments to their technology plans. However, that was decidedly *not* the Commission's official policy at the time Western Heights filed its Form 471 application, and that is not the Commission's official policy today. Refusing Western Heights' funding request under these circumstances, therefore, would be grossly unfair and

unreasonable. If the Commission believes that it is in the best interest of the program to limit the “size” of web servers, then it should decide and announce exactly how much web server storage capacity it is willing to support, so that schools and libraries can plan and make their technology purchases accordingly.

In rejecting Western Heights’ Request for Review, the WCB relied on what it described, essentially, as the finding of the Schools and Libraries Division (“SLD”) that Western Heights’ had failed to satisfy its burden of proof. According to the WCB, the SLD had rejected Western Heights’ request because it had failed to demonstrate adequately how it intended to use the web server storage capacity for an eligible purpose. However, as discussed in significantly more detail below, that was *not* the reason that the SLD gave publicly and officially (explicitly or implicitly) for rejecting Western Heights’ request. Rather, the SLD found, very simply, that the storage component of the web server system (Dell PowerVault 650F), the subject of the request, was an ineligible product, *per se*. Significantly, the SLD *never* disputed or even questioned Western Heights’ contention as to how it intended to use this equipment.

The only logical conclusion that Western Heights possibly could have deduced from all of this was that the SLD had decided for policy reasons, with the Commission’s blessing, to draw the line at “stand-alone” web server storage equipment and not to fund this class of hardware, *regardless of how the applicant intended to use it*. In short, there was no conceivable way that Western Heights could have known that it had a burden to disprove anything besides the SLD’s ostensible finding that *only* web servers with processor and storage functionality in a *single* box would be eligible for support as Internal Connections. The WCB’s decision to reject Western Heights’ funding request because it failed in its Request for Review to satisfy a burden of proof that it could not reasonably have known it had, we submit, is not a sound legal or equitable basis on which to deny funding. Accordingly, we respectfully request that the Commission grant Western Heights leave to make that showing here and, on the basis of that showing, to grant its Request for Review.

II. FACTS

- **Form 471 Application**

During the window application period for the 2000-2001 funding year, Western Heights filed a Form 471 application with the SLD seeking universal service support for the purchase of a web server system, including Dell PowerVault servers (FRN 429028). The SLD rejected Western Heights's request for funding because it included "Power Vault Storage," an ineligible storage device, according to the SLD.

- **Appeal to the SLD**

Western Heights appealed, explaining that it intended to integrate Dell Power Vault and Dell processor equipment together to create an eligible web server system. The SLD denied the request again and for the same reason, refusing to consider Western Heights' argument that PowerVault equipment should be eligible if it is an integral part of a web server configuration. The SLD's reasoning was straightforward and unambiguous:

- (a) The Power Vault 650F is a "highly scalable fiber channel RAID storage system."
- (b) "Data Storage is not an eligible function."
- (c) Therefore, the PowerVault 650F is not an eligible product.
- (d) Western Heights' Form 471 included the PowerVault 650F.
- (e) Because ineligible PowerVault equipment comprised more than 30% of the total pre-discount cost of the funding request, the entire request must be denied.

(Administrator's Decision on Appeal, attached hereto as Exhibit 3).

The SLD declined to leave open the door to eligibility -- even a crack. It stated flatly and unequivocally that the PowerVault 650 is *not* an eligible product. As discussed in more detail below, the WCB agreed with the result of the SLD's decision, but apparently not with the reasoning behind it, finding instead that the PowerVault 650 could be eligible, but only if the applicant could show that it was going to use it to store eligible data.

- **Request for Review**

Basis for Appeal. Western Heights appealed the Administrator's decision to the WCB. It contended among other things that the SLD's decision not to fund the PowerVault equipment as part of an eligible, integrated system of web server electronics was incorrect. Western Heights did not argue, as the WCB correctly observed, the issue of eligible versus ineligible storage, and for good reason. It did not raise this issue because it was *not* an issue in the SLD's decision to deny funding. Twice before, once in its application and again on appeal, Western Heights explained to the SLD that it intended to use the PowerVault's storage capability together with processor equipment to create a single, powerful web server system. *See* Letter of Appeal and Request for Review, attached hereto respectively as Exhibits 4 and 5). The SLD failed to challenge Western Heights' assertion either time, leaving Western Heights to believe reasonably that the SLD had accepted its explanation. Apparently, insofar as the SLD was concerned, the PowerVault 650 was simply ineligible, and that was that, *no matter how an applicant intended to use it*. While objectively that position seemed odd, those were the *only* facts that Western Heights had to work with.

Under the circumstances, the only logical conclusion that Western Heights could draw from the SLD's two decisions was that the SLD had adopted a policy to fund *only* file servers in which both processor and storage functionality resided in a *single* box.⁴ While that may or may not have been the case, that was all that Western Heights had to go on. That was all it could glean from the SLD's rather cursory decision on appeal, and thus, that is exactly what the school district focused on in its Request for Review.⁵ Western Heights contended that the SLD's decision to deny support for an otherwise eligible server, simply because it was comprised of two or more integrated boxes, was insupportable. It stressed that E-rate eligibility had always turned on and should continue to turn on what the equipment could do and how the applicant intended to use it.

⁴ We are puzzled by the WCB's matter of fact, footnoted statement that the SLD did not in fact decide this issue. (*Order* at n. 38). If the SLD decided a different issue, that fact is certainly not evident from the face of the SLD's decision, and whatever other finding the SLD may have made remains anything but evident.

⁵ See Request for Review, Issue B in particular, pp. 5-7.

Accordingly, Western Heights made sure to explain the PowerVault's role in a web server system and how it intended to use this powerful combination of networking hardware. This particular web server configuration was necessary, Western Heights told the WCB, to further the school district's unique technology needs and objectives which, it was quick to concede, were anything but mainstream. Furthermore, Western Heights made it perfectly clear that the procurement process leading up to its selection of Dell's PowerVault products was designed specifically to yield a web server solution to an instructional media distribution problem, and not to solve a data storage dilemma. In this regard and in pertinent part, this is what Western Heights explained to the WCB (Exhibit 5 at p.2):

In the fall of 1999, Western Heights went into the market to procure a web server solution that would be compatible with its sophisticated network and progressive technology plan. Accordingly, and in line with one of the E-rate program's principal objectives, the school district did not specify a particular web server solution, but rather, permitted interested vendors to suggest their own. Ultimately and after careful consideration, Western Heights decided upon a multi-box web server configuration from Dell Computer Corporation that it concluded was best suited to its current and future needs. That solution included a fiber channel RAID (Power Vault 650F).

The WCB's Decision. In its decision on review, the WCB reached the same result as the SLD but, to get there, appeared to travel down a very different path. The WCB agreed with Western Heights' contention that it should not view the PowerVault equipment as stand-alone hardware; it recognized that Western Heights intended to use the equipment as part of a "web server system." (*Order*, at para 8). In seemingly sharp contrast to the SLD, however, the WCB did not conclude that the PowerVault 650F was an ineligible storage product, *per se*. *Order* at n.38; *but see* Petition for Review, *supra*, at n.4.

Instead, the WCB decided to tackle head on what it characterized as Western Heights's failure to explain how it possibly could use so much storage space. What obviously distressed the WCB was the fact that the PowerVaults' storage capacity dwarfs the amount of storage space that the SLD's web site requires. *Order* at n.35. In this regard, the WCB stated:

SLD reasonably found that [Western Heights's] bare assertion that a storage request of this magnitude was solely for eligible web service was implausible and insufficient to demonstrate eligibility.

Order at para. 8. What the WCB failed to consider, however, were the vast differences between the SLD's web site and Western Heights' web site or, for that matter, almost any robust, K-12 web site. The SLD's web site is designed for adults and around a single message. It is a text-intensive, informational site that is static and devoid totally of graphics, photographs and animation. While it may serve up a training video from time-to-time, such cases are the exception, and the amount of video is nominal. In contrast, Western Heights web site is multi-dimensional and designed to serve a wide variety of audiences and age groups. As a tool designed primarily for teaching and communication, the Western Heights web site relies heavily on rich media -- graphics, photographs, and of course full motion, full screen, streaming video -- and quite a bit of it. Comparing the amount of web server storage space necessary to operate the SLD's web site to the amount necessary to operate Western Heights' web site is literally akin to comparing Apples and PCs. From the outside there may be some resemblance, but underneath the hood they are entirely different animals.

This so-called SLD finding, *the implausibility of Western Heights' assertion*, was the bedrock upon which the WCB rested its decision to deny the Request for Review. That foundation, however, has a serious fissure in it, and that is that the SLD *never* made such a finding, explicitly or otherwise. The SLD simply found that "the PowerVault 650F is an ineligible product." That was the sum and substance of the SLD's decision. The SLD said absolutely nothing about any "bare assertion" on the part of Western Heights, and neither the word, "implausible," nor anything like it appears anywhere in the SLD's decision.⁶

⁶ The WCB also made the following finding for which we can find no ostensible factual support: "In this case, based on the record before it, the SLD found that the amount of storage capacity did not reflect a request for storage solely for use as a web server." *Order* at para. 8. We have reread the SLD's decision carefully and can find no such finding in it. The SLD explained first that a PV650 RAID Storage System stores large amounts of data, then that data storage is not eligible for discount, and finally that the PowerVault 650F is an ineligible product. That in a nutshell is the SLD's decision. It was not much longer or more elaborate than that. If the SLD made any other findings and/or reached any other conclusions based on any other evidence or lack thereof, the SLD never shared that information with Western Heights.

In the end, the WCB ruled that Western Heights had an “affirmative burden” to show that it intended to use the web server system’s storage “solely for eligible purposes,” and that it had failed to satisfy that burden. Western Heights does not dispute that it failed to address this issue. Western Heights’ complaint is that it did not know, and indeed that it had no reason whatsoever even to suspect, that this was an issue -- let alone that it ultimately would become the determinative issue in the case.

III. BECAUSE THE WCB PLACED A BURDEN OF PROOF UPON WESTERN HEIGHTS TO DEMONSTRATE THE ELIGIBILITY OF WEB SERVER SYSTEM STORAGE, WHICH IT NEITHER KNEW NOR HAD ANY REASON TO KNOW THAT IT HAD, WESTERN HEIGHTS SHOULD HAVE THE OPPORTUNITY TO EXPLAIN MORE FULLY HOW IT WILL USE DELL POWERVAULT EQUIPMENT FOR ELIGIBLE PURPOSES.

The SLD ruled emphatically that the PowerVault 650F is not an eligible product, but the WCB disagreed. Instead, the WCB opened the door to a finding of conditional eligibility in the Internal Connections category, pending proof that the equipment’s storage capacity would be put to eligible use. However, because of the rudimentary nature of the SLD’s decision and the unequivocal tone that it took, Western Heights had no way of knowing when it was preparing its Request for Review that this issue would become the one upon which this entire matter would turn, so naturally it directed most of its attention elsewhere. This complete and utter lack of notice unquestionably prejudiced Western Heights’ ability to argue its case effectively to the WCB. To hold Western Heights to an evidentiary burden that it neither knew nor had any reason even to suspect that it had is inconsistent with fundamental principles of procedural due process. Accordingly, we respectfully request that the Commission either review the matter *de novo* or remand it to the WCB or the SLD for further processing.

IV. THE POWERVAULT EQUIPMENT IS ELIGIBLE FOR E-RATE SUPPORT BECAUSE WESTERN HEIGHTS WILL USE IT AS PART OF A WEB SERVER SYSTEM THAT WILL DISTRIBUTE UP TO SEVERAL TERABYTES WORTH OF RECORDED CLASSROOM AND OTHER INSTRUCTIONAL VIDEO ON DEMAND TO CLASSROOMS AND USERS OF THE INTERNET.

A. Web Server Systems Are Eligible For E-rate Support.

“A Web server used to provide information to users of the Internet is eligible for discount.” *Eligible Services List of the Schools and Libraries Support Mechanism*, “Servers” (October 18, 2002). It follows logically that a large web server system, like the one here, that provides the exact same functionality as its less powerful stand-alone cousins, would likewise be eligible for E-rate support, assuming, of course, that the applicant does not use it to perform ineligible functions. *See Order* at para. 8 and n.38.

B. Western Heights Will Not Use the Web Server System To Perform Ineligible Functions.

A “Web server” that an applicant uses “to provide substantial software applications, database functions or storage of end user files is considered an Application Server, Database Server, or Archive Server, respectively, and therefore is not eligible.” *Eligible Services List* (Servers). Western Heights’ web server system will not be used to store applications or databases or to backup data on the network. Therefore, it is not an Applications, Database, or Archive Server. What Western Heights’ will be using it for will be to provide instructional video and other materials to students, teachers, and users of the Internet via their Internet browsers. According to the *Eligible Services List* (Servers), this is clearly an eligible web server function. Since Western Heights will be using the web server system only for eligible purposes, the PowerVault component of it is eligible for E-rate support as a “Web server” in the Internal Connections category of service.

C. The Storage Capacity Of The Web Server System Is An Essential Element In The Transmission Of Information Within The School System.

Where an unusually large amount of storage capacity is incorporated into the design of an otherwise eligible product, the WCB has made it clear that the burden is on the applicant to show that it will be using that capacity only for eligible purposes.⁷ This is the only way to eliminate completely all doubt about the eligibility of the equipment. Storage is an eligible service when “it is an essential element in the transmission of information within the school or library.” *Order* at para. 4. On the other hand, storage of end-user files on a file server to supplement personal computers on the network is not eligible storage. *Order* at paras. 4 and 5. The eligibility of the PowerVault equipment turns, therefore, on whether it is an essential element in the transmission of information within the Western Heights school system or whether Western Heights is going to use it to store end-user files to supplement personal computers on the network. The answer is the former.

Western Heights will not be using this PowerVault equipment to store student work or any other files created by end-users. Rather, it will be using it for e-learning, for transmitting digital video of classroom lessons and other instructional materials to classrooms throughout the school district and to users of the Internet. The district’s plan is to record key courses, beginning with advanced math, on a regular basis throughout the year, and to serve up that video to students and teachers for later or repeated viewing, either alone or in conjunction with other coursework and materials. With about 1,200 classes being offered each day and a single hour of compressed video requiring approximately 4GB of storage, it is easy to see why it will take the kind of multi-Terrabyte storage capacity that the PowerVault equipment has to offer to transmit just a small fraction of the district’s core classes over the network.

To get this project off the ground, Western Heights has decided not to wait for the commitment of E-rate support and to begin investing its own funds. Thus, at least one

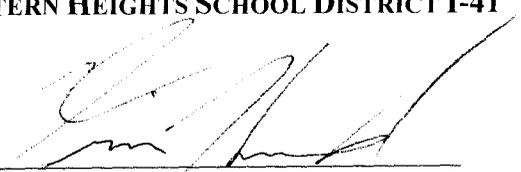
⁷ The WCB has failed to provide any guidance, however, as to how many Megabytes, Gigabytes or Terabytes of storage space it will take to trigger that burden.

web server systems is already in place in the school district. If Western Heights removes the PowerVault equipment from this web server system, it will be impossible to continue transmitting the recorded instructional video to anyone in the school system or to anyone for that matter. Obviously, therefore, the PowerVault equipment is an essential element in the transmission of information within the school district. Thus, it is an eligible Internal Connection and should be funded as such.

REQUESTED RELIEF

Western Heights requests that the Commission grant the instant Petition for Review of the WCB's Order, and remand this matter to the SLD with instructions to fund as soon as possible the request for support in FRN 429028.

Respectfully submitted on behalf of
WESTERN HEIGHTS SCHOOL DISTRICT I-41

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March 14, 2003

cc: Joe Kitchens, Superintendent
Western Heights School District I-41

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of
Request for Review of the
Decision of the
Universal Service Administrator by
Western Heights School District I-41
Oklahoma City, Oklahoma
Federal-State Joint Board on
Universal Service
Changes to the Board of Directors of the
National Exchange Carrier Association, Inc.
File No. SLD-197613
CC Docket No. 96-45
CC Docket No. 97-21

ORDER

Adopted: January 14, 2003

Released: January 15, 2003

By the Wireline Competition Bureau:

1. Before the Wireline Competition Bureau is a Request for Review filed by Western Heights School District I-41 (Western), Oklahoma City, Oklahoma. Western requests review of a decision by the Schools and Libraries Division (SLD) of the Universal Service Administrative Company (Administrator), denying one of Western's Funding Year 2000 requests for discounts under the schools and libraries universal service support mechanism. For the reasons set forth below, we deny the Request for Review.

2. Under the schools and libraries universal service support mechanism, eligible schools, libraries, and consortia that include eligible schools and libraries may apply for discounts for eligible telecommunications services, Internet access, and internal connections. The Commission's rules require that the applicant make a bona fide request for services by filing with the Administrator an FCC Form 470, which is posted to the Administrator's website for all

1 Request for Review of the Decision of the Universal Service Administrator By Western Heights School District I-41, CC Docket Nos. 96-45 and 97-21, Request for Review, filed May 10, 2001 (Request for Review).

2 Id. Previously, Funding Year 2000 was referred to as Funding Year 3. Funding periods are now described by the year in which the funding period starts. Thus, the funding period that began on July 1, 1999 and ended on June 30, 2000, previously known as Funding Year 2, is now called Funding Year 1999. The funding period that began on July 1, 2000 and ended on June 30, 2001 is now known as Funding Year 2000, and so on.

3 47 C.F.R. §§ 54.502, 54.503.

potential competing service providers to review.⁴ After the FCC Form 470 is posted, the applicant must wait at least 28 days before entering an agreement for services and submitting an FCC Form 471, which requests support for eligible services.⁵ Each such request is submitted on a separate Block 5 worksheet.⁶ SLD reviews the FCC Forms 471 that it receives and issues funding commitment decisions in accordance with the Commission's rules.

3. Applicants may only seek support for eligible services.⁷ The instructions for the FCC Form 471 state: "You may not seek support for ineligible services, entities, and uses."⁸ The instructions further clarify that "[w]hile you may contract with the same service provider for both eligible and ineligible services, your contract or purchase agreement must clearly break out costs for eligible services from those for ineligible services."⁹ Although SLD reduces a funding request to exclude the cost of ineligible services in circumstances where the ineligible services represent less than 30 percent of the total funding request, SLD will deny a funding request in its entirety if ineligible services constitute more than 30 percent of the total.¹⁰ Thus, an applicant

⁴ Schools and Libraries Universal Service, Description of Services Requested and Certification Form, OMB 3060-0806 (September 1999) (FCC Form 470); 47 C.F.R. § 54.504(b); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9078, para. 575 (1997) (*Universal Service Order*), as corrected by *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Errata, FCC 97-157 (rel. June 4, 1997), *affirmed in part*, *Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393 (5th Cir. 1999) (affirming *Universal Service First Report and Order* in part and reversing and remanding on unrelated grounds), *cert. denied*, *Celpage, Inc. v. FCC*, 120 S. Ct. 2212 (May 30, 2000), *cert. denied*, *AT&T Corp. v. Cincinnati Bell Tel. Co.*, 120 S. Ct. 2237 (June 5, 2000), *cert. dismissed*, *GTE Service Corp. v. FCC*, 121 S. Ct. 423 (November 2, 2000).

⁵ 47 C.F.R. § 54.504(b), (c); Schools and Libraries Universal Service, Services Ordered and Certification Form, OMB 3060-0806 (October 2000) (FCC Form 471).

⁶ FCC Form 471, Block 5.

⁷ 47 C.F.R. § 54.504 *et seq.*

⁸ Instructions for Completing the Schools and Libraries Universal Service Services Ordered and Certification Form (FCC Form 471) (September 1999) at 18 (Form 471 Instructions).

⁹ Form 471 Instructions at 23.

¹⁰ See *Request for Review of the Decision of the Universal Service Administrative Company by Ugly Community Schools*, *Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, CC Docket Nos. 96-45 and 97-21, Order, 15 FCC Rcd 23267 (Com. Car. Bur. 2000); *Request for Review of the Decision of the Universal Service Administrator by Anderson School*, *Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, CC Docket Nos. 96-45 and 97-21, Order, 15 FCC Rcd 25610, 25612-13, para. 8 (Com. Car. Bur. 2000). The "30-percent policy" is not a Commission rule, but rather is an SLD operating procedure established pursuant to FCC policy. See *Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, *Federal-State Joint Board on Universal Service*, CC Docket Nos. 97-21 and 96-45, Third Report and Order in CC Docket No. 97-21 and Fourth Order on Reconsideration in CC Docket No. 97-21 and Eighth Order on Reconsideration in CC Docket No. 96-45, 13 FCC Rcd 25058 (1998). This operating procedure, used during SLD's application review process, enables SLD to efficiently process requests for funding for services that are eligible for discounts but that also include some ineligible components. If 30 percent or less of the request is for funding of ineligible services, SLD normally will issue a funding commitment for the eligible services. If more than 30 percent of the request is for funding of ineligible services, SLD will deny the application in its entirety. The 30 percent policy allows SLD to efficiently process requests for funding that contain only a small amount of ineligible services

that seeks support for eligible services in an FRN that also includes ineligible services can avoid denial by subtracting out the cost of the ineligible services at the time of its initial application.

4. At the time of Western 's application, SLD's Eligible Services List listed file servers and web servers as eligible.¹¹ Under the Commission's precedents, however, such servers are only conditionally eligible products. In general, storage (the function provided by servers) is not an eligible service pursuant to the *Universal Service Order*.¹² However storage is an eligible service when it is an "is an essential element in the transmission of information within the school or library."¹³ Thus under the Commission's rules and precedents, schools and libraries universal service discounts are available to support storage of network operation systems and storage that assists with internet connection, but not for the storage of end user files or software applications.¹⁴ Consistent with this standard, the Commission found that servers such as "network file servers" were eligible for funding because they were "needed to switch and route messages within a school or library."¹⁵ The Commission emphasized that the eligible server's "function is solely to transmit information over the distance from the classroom to the Internet service provider . . ."¹⁶ Conversely, the Commission determined that file servers that were also "built to provide storage functions to supplement personal computers on the network" were not eligible for discounts.¹⁷

5. Similar limitations on eligible use apply to other equipment. For example, the December 1999 Eligible Services List stated that a device known as a Redundant Array of Independent Disks (RAID), defined as "a category of disk that employs two or more drives in combination for fault tolerance and performance," was eligible so long as it is "used in an eligible component."¹⁸ Consistent with the *Universal Service Order*, RAID disks are only

without expending significant fund resources working with applicants that, for the most part, are requesting funding of ineligible services.

¹¹ See Schools and Libraries Eligible Services List (December 2, 1999) (December 1999 Eligible Services List), at 25.

¹² *Universal Service Order*, 12 FCC Rcd at 9021, para. 461

¹³ *Universal Service Order*, 12 FCC Rcd at 9021, para. 459.

¹⁴ See SLD website, Eligible Services List, "Storage Products" and "Servers" entries (December 10, 2002) <<http://www.sl.universalservice.org/reference/eligible.asp>>.

¹⁵ *Universal Service Order*, 12 FCC Rcd at 9021, para. 460 (emphasis added).

¹⁶ *Id.* (emphasis added). Another example of a server necessary to the transport of information are e-mail servers, which act to route e-mail to and from end-users, which were determined to be eligible in the pending application. See Funding Commitment Decision Letter, at 8.

¹⁷ *Universal Service Order*, 12 FCC Rcd at 9022, para. 461. Thus, in a similar situation, the Bureau upheld SLD's denial of funding for servers that, while performing web-server functions, would also have been used to provide storage for a district-wide student database application. *Request for Review by Cleveland Municipal School District, Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, CC Dockets No. 96-45 and 97-21, Order, 16 FCC Rcd 15372 (Com. Car. Bur. 2001).

¹⁸ December 1999 Eligible Services List at 24.

eligible if they are used for eligible purposes, e.g., network access. RAID disks are not eligible to provide storage functions to supplement personal computers on the network.¹⁹

6. At issue is Funding Request Number (FRN) 429028, requesting discounts for internal connections, specifically for what Western refers to as a “multi-box web server.”²⁰ Western’s funding request consisted of processing servers, computers used solely to perform the processing functions of a web server, and PowerVault Storage servers, used to provide storage for the processing servers through the use of RAID technology (PowerVault Storage servers).²¹ On July 28, 2000, SLD issued a Funding Commitment Decision Letter denying funding for FRN 429028.²² Although SLD found that the processing servers were eligible web servers, it concluded that the PowerVault Storage servers were ineligible for discounts.²³ Finding that the ineligible PowerVault Storage servers constituted 30% or more of the request, SLD denied funding for all of FRN 429028.²⁴

7. Western then appealed to SLD.²⁵ Western asserted the PowerVault Storage servers, as used in Western’s service, were being used to provide storage for eligible web servers.²⁶ On April 27, 2001, SLD denied the appeal.²⁷ It stated:

“It should be noted that PowerVault 650F RAID Storage System is a highly scalable fiber channel RAID storage system with dual active redundant controllers. It supports up to 10 internal drives and 11 expansion units. Data storage is not eligible for discount.”²⁸

Western then filed the pending Request for Review.

¹⁹ The current Eligible Services List more clearly reflects this limitation, stating that “RAID disk drives are eligible only if used in an eligible component, for an eligible use.” SLD website, Eligible Services List (October 18, 2002) <<http://www.sl.universalservice.org/data/pdf/Eligible%20Services%20List%2010-18-02.pdf>>, at 24.

²⁰ Request for Review at 2; FCC Form 471, Western Heights School District 41, filed January 12, 2000.

²¹ Request for Review at 4; *see also* E-mail from John Harrington, Funds for Learning, to Richard Nyquist, dated March 14, 2000, at Attachment (Service Cost Breakdown).

²² Letter from Schools and Libraries Division, Universal Service Administrative Company, to Joe Kitchens, Western Heights School District 41, dated July 28, 2000, at 6 (Funding Commitment Decision Letter).

²³ *Id.*

²⁴ *Id.*

²⁵ Letter from John Harrington, Funds for Learning, to Schools and Libraries Division, Universal Service Administrative Company, filed August 28, 2000 (SLD Appeal).

²⁶ *Id.* at 1-2.

²⁷ Letter from Schools and Libraries Division, Universal Service Administrative Company, to John Harrington, Funds for Learning, LLC, dated April 27, 2001 (Administrator’s Decision on Appeal).

²⁸ *Id.* at 2.

8. After reviewing the record, we affirm SLD's decision. SLD must ensure compliance with the Commission's rules, including the restrictions on eligible storage that the Commission has previously established.²⁹ Because the schools and libraries universal service support mechanism has, in recent years, had very limited ability to fund any internal connections requests, it is particularly important that SLD ensure that the limited funds available are used to support only those internal connections services that are eligible under program rules.³⁰ In this case, based on the record before it, SLD found that the amount of storage capacity did not reflect a request for storage solely for use as a web server.³¹ The documentation submitted to SLD indicated that the requested web server system would include 24 PowerVault servers with ten 18 Gigabyte drives each.³² Western, with 3,260 students, thus requested a total storage space of approximately 4.3 Terrabytes, more than a Gigabyte of storage per student.³³ To support the eligibility of this storage, Western provided only generalized and unsupported assertions that the storage would be used to support web page service.³⁴ SLD reasonably found that Western's bare assertion that a storage request of this magnitude was solely for eligible web service was implausible and insufficient to demonstrate eligibility.³⁵

9. Western argues that SLD never requested further evidence that the server system would be used solely to support web access, and that, "[i]f due diligence required the SLD to ask for additional certifications to this effect, it could certainly have requested one."³⁶ However, we have held that the ultimate burden of demonstrating eligibility is on the applicant.³⁷ Therefore,

²⁹ 47 C.F.R. § 54.705(a)(1)(iii).

³⁰ In Funding Year 2001, funds were sufficient only for requests from applicants with a discount rate of at least 85%. See SLD website, What's New (August 7, 2001), <<http://www.sl.universalservice.org/whatsnew/082001.asp#080601>>. For Funding Year 2002, SLD has not yet determined whether it will be able to fund any requests from applicants with less than a 90% discount rate. See SLD website, What's New (September 26, 2002), <http://www.sl.universalservice.org/whatsnew/default.asp#092602b>>.

³¹ Administrator's Decision on Appeal; Funding Commitment Decision Letter.

³² Service Cost Breakdown. More specifically, this breakdown specified that Western would purchase 2 PowerVault 650F servers and 22 PowerVault 630F servers. *Id.* Although the Administrator's Decision on Appeal referenced only the 650F, this was evidently used as a shorthand for both the 630F and the 650F, because its Funding Commitment Decision Letter was based on the ineligibility of all of the PowerVault servers and the 650F alone did not consist of 30% or more of the request. See *id.*; Funding Commitment Decision Letter. In addition, we find no reason in the record to distinguish between the 630F and the 650F for eligibility purposes. We therefore review SLD's funding decision considering both the 630F and the 650F servers requested.

³³ See Western Form 471.

³⁴ SLD Appeal at 1-2; Request for Review at 6.

³⁵ As a rough comparative example, SLD personnel have informed us that their entire website occupies approximately 640 Megabytes. Western thus seeks discounts on equipment that provides storage that could hold 6,615 of such sites.

³⁶ Request for Review at 6.

³⁷ *Request for Review by Carrollton-Farmers Branch Independent School District, Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, File No.

applicants have the affirmative burden to provide evidence on any issues of eligibility challenged by SLD. Western has not provided any concrete and specific evidence regarding how it would use the substantial amount of storage requested with either its SLD Appeal or the Request for Review sufficient to demonstrate that the servers will be used solely for eligible purposes. We therefore uphold SLD's determination that Western failed to demonstrate that the PowerVault servers were eligible for funding.³⁸

10. We further find that the PowerVault servers comprise more than 30% of the funding request. Specifically, the PowerVault servers cost \$375,118, or 69% of the total request of \$539,888.³⁹ Because more than 30% of FRN 429028 was properly found to be ineligible, we affirm SLD's decision denying funding for the entire request.

11. ACCORDINGLY, IT IS ORDERED, pursuant to authority delegated under sections 0.91, 0.291, and 54.722(a) of the Commission's rules, 47 C.F.R. §§ 0.91, 0.291, and 54.722(a), that the Request for Review filed by Western Heights School District I-41, Oklahoma City, Oklahoma, on May 10, 2001 IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION

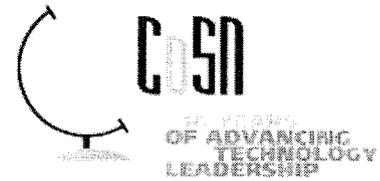
Carol E. Matthey
Deputy Chief, Wireline Competition Bureau

SLD-229384, CC Dockets No. 96-45 and 97-21, Order, DA 02-2009, para. 9 (Wireline Comp. Bur. rel. August 27, 2002).

³⁸ Western also argues that web servers should be eligible regardless of whether the storage and processing functions are provided in one computer or in multiple computer systems such as Western's. *See generally* Request for Review. Because neither SLD's determination nor our own is based on the fact that the storage here was provided in a computer separate from the computer responsible for processing, we need not address these arguments.

³⁹ *See* Service Cost Breakdown.

Resources



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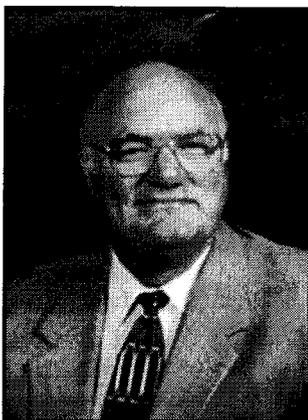
2001 Award Winner: Joe Kitchens

Joe Kitchens

Superintendent

Western Heights School District
8401 SW 44th Street
Oklahoma City, OK 73179

Nominee's Achievements



Joe Kitchens is a one-of-a-kind school superintendent, a technological visionary who has built a state-of-the-art network for his low-income school district, then shared what the district has learned with schools all across the country. Kitchens has combined four successful bond campaigns totaling \$8 million, E-rate discounts and corporate

support to bring fiber-optic connectivity to his students' desktops, train all of his staff members and create a computer-to-student ratio in his district of 1:2. Kitchens has also worked tirelessly to help his more techno-phobic peers understand his vision and to encourage technology companies to build products that will meet the real needs of schools.

Joe Kitchens achieved these goals through a dogged determination and by building strong partnerships with corporate America to help secure the additional equipment and financial support that he needed.

- He led the campaign to build JetNet, a 17-mile fiber-optic, gigabit network that tied together all of Western Heights' schools and administration building, providing a 100-meg Internet connection and videoconferencing capability to every classroom in the district. JetNet

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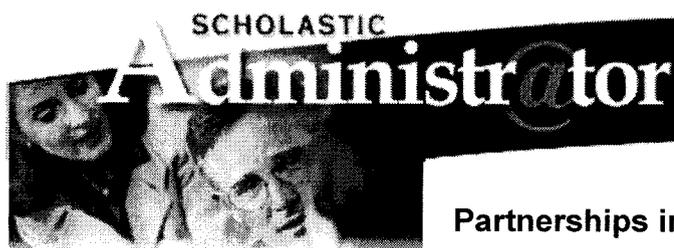
EXHIBIT 2

was recognized in fall 1997 at an Education Technology Forum organized by the U.S. Senate Democratic Steering Committee and in 1998 by the annual ComputerWorld/Smithsonian Awards program, which honors noteworthy technology achievements.

- Saw to it that every teacher could receive paid training time during the summer before they began using the network--and 200 of his 230 staff members took him up on the offer. The district's experience in implementing technology was featured in "Creating Connected Learning Communities," a chapter in Bill Gates' book, "Business @ the Speed of Thought
- He took the initiative to organize a workshop, attended by more than 25 Oklahoma superintendents, to help them understand the E-rate program and some of the innovative technologies it could support. As a result, a number of economically disadvantaged districts decided to prepare tech plans and seek E-rate support that first year. Kitchens followed up again the next spring, working with the South-Central Regional Technology Laboratory and a \$150,000 corporate grant to host four multi-day workshops to help superintendents and technology directors understand the E-rate, new emerging technologies and related issues.
- Spearheaded a statewide project called VISION, supported with funding and in-kind contributions from Microsoft, Dell and Intel, that is designed to replicate what has been accomplished at Western Heights across the state of Oklahoma. In addition to building the kind of advanced infrastructure that Western Heights enjoys, the project would also shared, through distance learning technologies, the curriculum and professional development resources that the district has developed. In addition, the project provided a way of organizing a wide variety of content resources so they can be easily accessible by teachers across the state. The project's reach included Native American schools in Oklahoma.

Kitchens still finds time to serve (since 1991) on the Oklahoma State Superintendent's Advisory Council, as regional director of the Oklahoma Commission on Children and Youth, and on the board of directors of the ACADEMY, a University of Kansas program designed to promote the use of new technologies to meet the needs of disabled students. In 1999, Intel Corp. recognized Kitchens' contributions to the teaching profession by endowing an education technology scholarship in his name at his alma mater, Oklahoma State University.





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Partnerships in the Digital Age

Building school technology through community support

By Joe Kitchens

Today, the Western Heights Public School District in Oklahoma City is widely recognized as having one of the most advanced educational technology infrastructures in America. But it wasn't always this way. In fact, our district entered the digital age just five years ago.

In 1997, after several years of planning, we unveiled JetNet — a robust, district-owned fiber optic network. Through its deployment of advanced Web, video, and telephony-based applications, JetNet supports both instructional and administrative activities throughout the district. JetNet's innovations have been praised by luminaries such as Gates, who referred to it as "supporting of the most advanced technology-based applications in the country."

Prior to the construction of JetNet, however, there was very limited technology activity in the district. There were no local-area networks (LANs) in place, and the idea of a district-owned, wide-area network seemed almost inconceivable. It was during this time, in 1994, that our school board commissioned a 24-member committee to study and provide recommendations on the development of a cutting-edge technology program for the district.

In a brilliant move designed to galvanize the support of the community, the school board appointed only five members of the committee, leaving the community to select the other nineteen. For nearly one year, this committee studied the needs and desires of the school district and community. The committee's final recommendations to the board included a technology bond issue for the purpose of constructing JetNet.

The school board's community-inclusion strategy worked. The bond issue was approved by 83 percent of voters. Since then, the school board has passed five additional bond issues — totaling more than \$13 million, or approximately \$4,000 per student — to continue the initiative.

SIX STEPS TO SUCCESS

Through the planning, design, construction, implementation, and use of JetNet over the past eight years, the staff and school board of the Western Heights Public Schools have learned some important lessons about managing a large-scale technology project.

1. Engage the community in your project. Our school board's decision to involve the public in the beginning was crucial to the success of our program. The board sealed the community's support by letting the community select its own representatives on the technology planning committee. As a result, the public relations battle was won before the bond issue was even on the radar screen. Gaining public support early on established the board's credibility and created a foundation of trust.
2. Gain a thorough understanding of technology. School leaders must get up to speed quickly about the ways technology can effectively be deployed at the district level. As superintendent, I initially found the new technology concepts quite challenging. I soon realized that I had to increase my understanding

- of school technology — and that I needed to find impartial sources in order to so.
3. Seek out unbiased technical advice. Our district found that it could not depend on technology integrators to offer unbiased advice about the appropriate direction for the JetNet initiative. That's why we decided to hire a telecommunications engineering firm to design JetNet's specifications and functionality. This firm was barred from participating in construction and implementation work, thus removing any potential conflict of interest. Serving the board in a manner similar to that of an architect, the firm designed and tested the implementation of specifications and held the integrators responsible for their work.
 4. Use the train-the-trainer model. Staff training is not a novel concept, but it is difficult to implement effectively. Knowing that teachers are most comfortable when they are supported and trained by their colleagues, we created teams of educators to serve as on-site trainers at the district's schools. These trainers support the general staff on JetNet's applications. We also use this model to train the technology staff.
 5. Don't get locked into a single technology, vendor, or integrator. Technology independence means that your district is free to pursue its own vision, rather than that of a particular vendor. Our district does not hold any maintenance contracts on hardware and very few on software. Because they can relate to the needs of the instructional staff much better than outside consultants can, the district technology staff implements all software and hardware applications on the network. If an application can't be maintained by in-house staff, we don't buy it.
 6. Plan for the future. School districts should always look toward the future of technology and its application to education. In our district, the staff is regularly in touch with leading technology vendors. We schedule frequent visits to research facilities, such as the Intel Architecture Labs, to see first-hand what awaits us in the next several years. These trips give us valuable insight into new technologies that can be extremely important in the district's future technology planning.

This is a very exciting time for school leaders in education. New technologies offer the potential for fundamental change in the way school districts function in America, and they provide for greater flexibility in the ways schools can support teachers, students and parents. As school leaders, we must stay actively involved in technology so that we can help our schools navigate through the changes and challenges that lie ahead.

Joe Kitchens, superintendent of Western Heights Public Schools in Oklahoma City, has received numerous leadership awards.



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オクラホマ州教育省

概要

ビジネス課題

ソリューション

オクラホマ州教育省: ビジネス課題

生徒の学習と教師の柔軟性を促進する技術の使用

多くの政府機関や民間企業と同様に、オクラホマ州教育省資源で多くのことを行おうとしています。オクラホマ州で教師、議員が、テストの点数を上げることは言うまでもない劇的改善を要求しています。しかし多額の資金を調達できません。オクラホマ州は、2001年だけで35億ドル以上を項目である幼稚園から高校までの教育費として支出しました。オクラホマの人々は、さらに多くの費用をかけることなく、投資り多くの見返りを期待しています。

もちろんこの筋書きはオクラホマに限ったことではありません。オクラホマの教育担当官がこの難問に対処した方法は、られないものです。州全体で60万人の生徒に、Oklahoma いう革新的 IT プログラムが提供されています。これは、Internet School In Oklahoma Network (オクラホマ・ネット想インターネット学校) を省略したものです。このプログラムはオクラホマの教育を新たなものにしています。その基盤は、標準 Web サービス、拡張性のあるインテル(R) ベース・サーバの企業規模ネットワーキング技術、インテル(R) ソリューションの e-Business 専門技術にあります。

Oklahoma VISION は、オクラホマ・シティの Western He 高責任者である Joe Kitchens 氏が考え出したものです。1 は、州規模の教育ネットワークのアイデアを州議員に提案。このネットワークは、インターネット技術を使用して、教向上、コスト削減、説明責任の改善を目指すものでした。彼の言葉を信じて、VISION プロジェクトに予算を計上す

一致で可決しました。

プラットフォームとアプリケーションの統合

しかし資金確保は、Kitchens 氏とそのチームが直面した多最初のひとつに過ぎませんでした。Oklahoma VISION は、い技術に対処しそれを提供するのではなく、生徒のニーズを、柔軟で最先端のソリューションを捜し求めています教師および地方に権限を持たせることができる適応性のあクチャを探していました。また、責任説明、つまりコンテンツでのよりよい成績に関連した方法論とサービスの提供を段も必要でした。学校は学習内容を提供し追跡するソリューションとして提供しています。ダイナミックな学習環境を、出欠、成績進捗の追跡と報告のためのシステムと結びつけられる組みVISION プロジェクトをほかと一線を画したものにしてい

Web サービスがそのソリューションを可能にしました。V の定義はさまざまですが、Gartner は多くの人々が同意でな定義を行っています: 「Web サービスは、ダイナミックし、標準インターネット技術を使用したソフトウェア・コトで、システム間をつなぐ橋の構築を可能にします。もし築しなければ広範囲にわたる開発努力が必要になります。サービスでは、Web ポータルと XML によってアプリケーションクセスが簡単になります。これは、HTML と Web ブラウアクセスを簡単にすると同じ方法です。

オクラホマは、Web サービス技術を採用することで、未踏込んでいました。この技術はどれも完成しているというわけではありません。どれを選択するかによって、いちかばちかの決断す。例えば、どのソリューションが高い費用効果で何千もを処理できるのでしょうか。どのソリューションが、ストグ・ビデオや、大きな帯域幅を必要とするそのほかの媒体供できるのでしょうか。どのソリューションが、エラーの用性を提供してくれるのでしょうか。どのソリューションウェア会社や開発者にとって魅力的でしょうか。そしてどのソリューションが、利益をもたらしてくれるのでしょうか。

概要

ソリューション まとめ

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Administrator's Decision on Appeal - Funding Year 2000-2001

April 27, 2001

John Harrington
RE: Western Heights School District 41
Funds For Learning, LLC
229 North Broadway
Edmond, OK 73034

Re: Billed Entity Number: 139844
Application Number: 197613
Funding Request Number(s): 429028
FCC Decision Docket: DA 00-2700
Your Correspondence Dated: August 26, 2000

After thorough review and investigation of all relevant facts, the Schools and Libraries Division ("SLD") of the Universal Service Administrative Company ("USAC") has made its decision in regard to your appeal of SLD's Year Three Funding Commitment Decision for the Application Number indicated above. This letter explains the basis of SLD's decision. The date of this letter begins the 30-day time period for appealing this decision to the Federal Communications Commission ("FCC"). If your letter of appeal included more than one Application Number, please note that for each application for which an appeal is submitted, a separate letter is sent.

Funding Request Number: 429028
Decision on Appeal: **Denied in full**
Explanation:

- Your appeal stated that, Web Servers are eligible for funding under all published SLD eligibility Standards. SLD determination does not consider the use or context of the device. SLD showed bias in denying this brand of web server components. Also SLD may not deny funding based on internal unpublished eligibility standards inconsistent with its published eligibility standards. You concluded by asking SLD to provide funding for alternative web server configuration if PowerVault devices are ineligible.
- It should be noted that PowerVault 650F RAID Storage System is a highly scalable fiber channel RAID storage system with dual active redundant controllers. It

supports up to 10 internal drives and 11 expansion units. Data storage is not eligible for discount. Your request for an alternative web server configuration is denied as amendments to Forms 471 already filed can only be made before the close of the application window.

- Your Form 471 application included costs for the following ineligible products: PowerVault 650F. FCC rules provide that discounts may be approved only for eligible services. *See* 47 C.F.R. §§ 54.502, 54.503. The USAC website contains a list of eligible services. *See* USAC website, <http://www.universalservice.org>, Eligible Services List. Program procedures provide that if 30% or more of an applicant's funding request includes ineligible services, the funding request must be denied. 74% of your funding requests were for ineligible services. Therefore, your funding requests were denied. You did not demonstrate in your appeal that your requests included less than 30% for ineligible services. Consequently, SLD denies your appeal.

If you feel further examination of your application is in order, you may file an appeal with the Federal Communications Commission, Office of the Secretary, 445 12TH Street, SW, Room TW-A325, Washington, DC 20554. Before preparing and submitting your appeal, please be sure to review the FCC rules concerning the filing of an appeal of an Administrator's Decision, which are posted to the SLD Web Site at <www.sl.universalservice.org>. You must file your appeal with the FCC no later than 30 days from the date of the issuance of this letter, in order for your appeal to be timely filed.

We thank you for your continued support, patience, and cooperation during the appeal process.

Schools and Libraries Division
Universal Service Administrative Company

Cc: Joe Kitchens
Western Heights School District 41
8401 SW 44th Street
Oklahoma City, OK 73179

August 26, 2000

Letter of Appeal
Schools and Libraries Division
100 S. Jefferson Road
Whippany, NJ 07981

Applicant Name:	Western Heights Public Schools
Billed Entity Number:	139844
Form 471 Application Number:	198790
Funding Request Numbers:	431862, 431875
FCDL Date:	July 28, 2000
Funding Year:	07/01/2000 – 06/30/2001

Dear Sir or Madam:

This appeal is filed for and on behalf of Western Heights Public Schools (“WHPS”). WHPS hereby appeals the July 28, 2000 decision of the Schools and Libraries Division (SLD) not to fund Funding Request Numbers 431862 and 431875

FRN 431862: Web Server

The funding decision by the SLD states that this funding request was denied because “30% or more of this FRN includes a request for Powervault 630F which is an ineligible product based on program rules.”

I. Summary and Statement of Facts

WHPS requested web servers to provide Internet and intranet access capability to individual classrooms. This functionality is an essential component to the transport of information to the classroom, well within the definition of eligible internal connections set forth in Section 54.506 of the Federal Communication Commission’s rules. Accordingly, Web Servers are specifically listed as eligible on the Eligibility List.

II. Web Servers Are Eligible For Funding Under All Published SLD Eligibility Standards

The SLD’s published Eligibility List clearly states that Web servers—both Internet and Intranet—are eligible. It is evident from the list and certainly makes sense from a technological perspective that a web server is an “internal connection,” if it plays an integral role or, as the FCC states, is “an essential element” in the transmission of information to the classroom.

III. The SLD's Determination Does Not Consider The Use Or Context Of The Device.

As shown above, based on the SLD's published Eligibility List, it was reasonable for WHPS to conclude that a Dell Powervault product, when used in an eligible manner and as part of an otherwise wholly eligible web server configuration, was an eligible internal connection. WHPS was informed that based on an internal, unpublished eligibility standard, particular models of the Dell brand Powervault are unconditionally not eligible.

In this case, the SLD did not take into consideration the use of the device. The SLD made the arbitrary determination that the device is ineligible because it could be used for an ineligible purpose. If the SLD applies this standard to all requests for funding, every request would be uniformly denied. The SLD certainly could not declare that all Intel Pentium processors are unconditionally ineligible because they can be used for ineligible purposes. Thus, the context and use of the requested device **must** be taken into consideration before making a determination of eligibility.

The function of the requested device should be the primary consideration in determining its eligibility. The SLD did not contact WHPS or its representatives to request information regarding the proposed use of the denied devices. If the SLD had contacted WHPS or its representatives, the SLD would have been informed that the requested devices are to be used as an integral part of a web server, clearly an application of the devices that is eligible according to published eligibility standards.

IV. The SLD Showed Bias In Denying This Brand Of Web Server Components

In establishing the Schools and Libraries Program, the Commission accorded schools broad discretion to "make their own decisions regarding which technologies would best accommodate their needs, [and] how to deploy those technologies..."¹ As a "technology neutral" program, the Universal Service Funding program should not hold preferential treatment to one solution over another.

The SLD staff interviewed by WHPS representatives said that fiber channel disk arrays (such as the Powervault 630F) are ineligible; this same SLD representative confirmed that the Eligibility List specifically states that RAID, or Redundant Array of Independent Disks, configurations are eligible.

When WHPS accepted bids for its web servers, it allowed bidders to submit any type of solution, including those with RAID and Fiber Channel disk arrays. Indeed, other technical solutions are available that would achieve the same web server functionality without using the Powervault equipment. Attachment A contains a new configuration of the WHPS web servers that specifically excludes Powervault equipment but achieves the same basic web server functionality.

¹ *Report and Order*, CC Docket No. 96-45 12 FCC Rcd. at 9019.

If WHPS were to have requested web server components other than the Powervault devices, no question of eligibility would have been raised. Yet, because WHPS exercised its own decision making process regarding its web server components within SLD published standards and guidelines, funding was denied by the SLD. This result makes no sense whatsoever.

If the SLD continues this practice of showing preference to certain solution designs, Schools and Libraries will not have the freedom to choose the technologies, products, and services that would best accommodate their needs. Furthermore, the fair and open competition that is currently encouraged through this process would become stifled because only certain sub-components or system designs are eligible for otherwise eligible services.

V. SLD May Not Deny Funding Based on Internal Unpublished Eligibility Standards Inconsistent With Its Published Eligibility Standards

As shown above, based on the SLD's published Eligibility List, it was eminently reasonable for WHPS to conclude that a web server using a Fiber Channel disk array was an eligible internal connection. While not identified by specific brand name on the SLD's public Eligibility List, both its type and functionality reasonably lead to the conclusion that a web server is eligible. It is by these publicly announced Eligibility List standards that WHPS's application should have been evaluated and granted.

Where the ground have not been made public so as to permit applicants to make informed judgments in filing applications, the law is clear that funding should not be denied based on an unknown standard.² In the Williamsburg-James City case, for example, the Commission determined that it was an error for the SLD to deny a funding request because of the applicant's failure to segregate Priority 1 Telecommunications Services from Priority 2 Internal Connections when, at the time the application was filed, the Commission's rules of priority had not been adopted and released. This case present an even more egregious situation for the SLD acted on the basis of an internal eligibility guideline, quite different from its published Eligibility List standards on which WHPS reasonably relied. As the Court of Appeals has cautioned with respect to another agency's reliance on non-public standards to determine what constitutes an impermissible substance, "a complicated regulatory regime...cannot function effectively unless citizens are given fair notice of their obligations." Massachusetts v. Blackstone Valley Electric Co., 67 F.3d 981,991 (1st Cir. 1995).

In attempting to ascertain the basis for this funding, WHPS was informed by the SLD staff that funding was denied on the basis of internal SLD staff eligibility guidelines classifying the requested web servers as ineligible products because they included Powervault 630F equipment. Further, WHPS was advised that while this classification information is not in the SLD's published Eligibility List, WHPS would have been

² See e.g., Request for Review of Decision by Williamsburg-James City Public Schools, 14 FCC 2nd Rcd. 20152 (1999); and Request for Review by Bonner Springs Unified School District # 204, DA00-1044, released May 17, 2000.

informed of the SLD's ineligible classification, had it checked with the SLD staff prior to filing its FCC Form 471 Request for Funding.

This "you should have asked and we would have told you" approach does not cure the situation. As the Commission has ruled on numerous occasions, informal SLD staff advice is no substitute for the published Eligibility List on the SLD website. In situations where the informal SLD staff advice has been incorrect, the Commission has held that published rules and policies must nonetheless be enforced to deny the applicant's request for funding despite its good-faith reliance on the incorrect staff guidance.³ Certainly, the same principle applies when the SLD is essentially contending that an internal guideline should override its own published Eligibility List on the SLD website. To hold otherwise would be completely contrary to the Commission's holding in the recent Ubly case expressly cautioning applicants to use and rely upon the SLD published Eligibility List. Request for Review of Decision by Ubly Community Schools, DA00-1517, released July 10, 2000, ¶ 6. Furthermore, such an illogical holding would place applicants in a true "Catch 22" situation, precluded from relying on informal staff advice in some cases, but required in other cases to seek and rely on exactly the same type of staff advice.

FRN 431875: Web Server Tape Backup

WHPS requested funding support for two DLT 7000 tape backup drives for the web servers referenced in FRN 431862. The SLD funding commitment decision stated that "30% or more of this FRN includes a request for Powervault 130T which is an ineligible product."

I. Tape Backups for Web Servers Are Eligible For Funding Under All Published SLD Eligibility Standards

The Eligibility List states "Tape Backup devices are eligible when used as part of an eligible server." As mentioned earlier, the List also specifically states that Web Servers are eligible for support. Because it was requesting funding support for an eligible tape backup device for an eligible web server, WHPS is at a loss to explain the rationale for the SLD's funding decision.

The Eligibility List *does not state* that only certain types of tape backup solutions are eligible. Again, it appears that the SLD is demonstrating a bias towards certain types of devices, regardless of the context in which they are employed. WHPS could have used SCSI tape backup devices for its web servers, and presumably the SLD would have funded the request. But, because WHPS exercised its freedom to choose among various tape backup technologies – unaware of any SLD preference for a particular type or brand – WHPS has been denied funding.

³ See e.g., Request for Review of Decision by Ruidoso Municipal School District, DA00-105, released January 21, 2000.

RELIEF SOUGHT

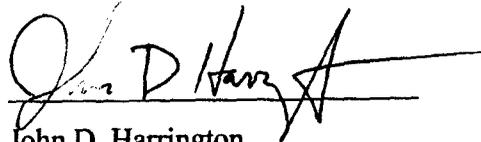
For these reasons, WHPS requests that the funding decision of the SLD in FRN 431862 and FRN 431875 be reversed and be processed consistent with published SLD eligibility standards under which web servers and tape backup devices are clearly eligible for funding. If the SLD insists on classifying Powervault devices as ineligible, regardless of context, WHPS requests that the alternative web server configuration submitted with this appeal (see Attachment A) be used instead⁴.

FRN	Funding Commitment Decision
431862	\$260,431.08
431875	\$ 9,424.80

Respectfully submitted,

WESTERN HEIGHTS PUBLIC SCHOOLS

By:



John D. Harrington
Funds For Learning, LLC
229 North Broadway
Edmond, OK 73034
(405) 341-4140

cc: Joe Kitchens
Western Heights Public Schools

⁴ The new "no-Powervault" web server configuration totals \$892,335.00. WHPS recognizes that, should the SLD choose to approve the new configuration, the funding commitments are limited to the dollar amount originally requested on the Form 471.



May 8, 2001

Magalie Salas
Secretary
Federal Communications Commission
445 12th Street SW
Room TW-A325
Washington, DC 20554

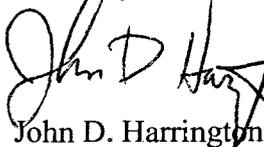
**RE: In the Matter of Request for Review of the Decision of the Universal Service
Administrator FCC Decision Docket DA 00-2700 by Western Heights School
District I-41 Under FCC Docket Nos. 96-45 and 97-21**

Dear Ms. Salas:

Enclosed, please find the original and four copies of the Request for Review of the Western Heights School District I-41 in the above-referenced matter.

Also attached is a copy of this letter to be stamped with the date received and returned in the self-addressed stamped envelope.

Sincerely,



John D. Harrington

JDH/ajh
enclosures

EXHIBIT 5

**Before the
Federal Communications Commission
Washington, DC**

In the Matter of:)	
)	
Request for Review of the Decision of the Universal Service Administrator by)	
)	
Western Heights School District I-41 Oklahoma City, OK)	FCC Decision Docket DA 00-2700
)	
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
)	
Changes to the Board of Directors of the National Exchange Carrier Association, Inc.)	CC Docket No. 97-21
)	
To: The Commission Chief, Common Carrier Bureau		

REQUEST FOR REVIEW

Pursuant to Subpart I of Part 54 of the Commission's rules, Western Heights School District I-41 ("Western Heights"), by its representative, hereby seeks review of the determination of the Schools and Library Division of the Universal Service Administrative Company ("SLD"), dated April 27, 2001, denying Western Heights' request for funding in Funding Request Number 429028 (Form 471 No. 197613).

I. Issues

- A. Whether the SLD's decision not to fund a request for discounts on Redundant Array of Independent Disks (RAID) devices was incorrect in view of Western Heights' assertion that the devices would be used in accordance with the rules governing conditional eligibility set forth in the SLD's Eligible Services List.**
- B. Alternatively, whether the SLD should have funded the RAID device as a web server or an integral web server component.**
 - 1. Whether the test for "internal connections" continues to turn on what the applicant certifies a piece of network hardware *will do*,**

rather than on what the hardware is *capable of doing*, in the applicant's network.

2. Assuming that the test remains what the applicant certifies the hardware *will do*, whether it matters for E-rate eligibility purposes how many pieces of integrated hardware operating together it takes to perform that function.

II. Statement of Material Facts

Many are surprised to learn that Western Heights, a small, relatively poor school district on the western edge of Oklahoma City, has one of the most advanced K-12 data/voice/video networks in the country -- and teachers who know how to use it. See *Business @ the Speed of Thought*, Bill Gates, Warner Books, pp 388-391 ("This is not the school district that you might expect to lead the charge into the Information Age. Yet in the last three years the district has overwhelmingly voted three times to spend a total of more than \$6.8 million in local funds to create perhaps the leading technology-driven curriculum in the country."). National, cutting edge technology companies routinely use the school district's network as a laboratory to test their latest K-12 networking products.

In the fall of 1999, Western Heights went into the market to procure a web server solution that would be compatible with its sophisticated network and progressive technology plan. Accordingly, and in line with one of the E-rate program's principal objectives, the school district did not specify a particular web server solution, but rather, permitted interested vendors to suggest their own. Ultimately and after careful consideration, Western Heights decided upon a multi-box web server configuration from Dell Computer Corporation that it concluded was best suited to its current and future needs. That solution included a fiber channel RAID (PowerVault 650F).

Thereafter, in Form 471 No. 197613 (Program Year Three Window Period Application), Western Heights applied for E-rate discounts on the Dell multi-box web server, which proved to be far more cost effective than traditional, single-box solutions in Western Heights' unique networking environment. On July 28, 2000, the SLD blocked the district's networking progress and ability to select freely among competing

technologies by issuing a cursory decision letter denying the funding request in its entirety. According to the SLD, the network hardware that Western Heights intended to purchase to serve up web pages failed to qualify for E-rate support as “internal connections.”

Western Heights appealed the SLD’s initial determination, pointing out among other things that although the network hardware it intended to purchase certainly was not a garden variety, out-of-the-box, web server and tape backup unit, as a practical matter, it was just that. On April 27, 2001, however, the SLD again denied Western Heights’ requests for funding. (*See* Attachment). The stated reason was that 30 percent or more of the estimated pre-discount cost was for an “ineligible product.” The product that the SLD concluded was ineligible was the Dell PowerVault 650F:

It should be noted that PowerVault 650F RAID Storage System is a highly scalable fiber channel RAID storage system with dual active redundant controllers. It supports up to 10 fiber channel drives and 11 expansion units. Data storage is not eligible for discount.

3. Discussion

Issue A. Whether the SLD’s decision not to fund a request for discounts on a Redundant Array of Independent Disks (RAID) was incorrect in view of Western Heights’ assertion that the device would be used in accordance with the rules governing conditional eligibility set forth in the SLD’s Eligible Services List.

In its Decision on Appeal, the SLD concluded, and we do not disagree, that the Dell PowerVault 650F (“650F”) is a “RAID.” For this reason alone, the SLD refused to fund Western Heights’ requests for discounts on the 650F. With this determination, of course, we disagree.

The Eligible Services List on the SLD web site dated December 18, 2000 states that a “Hard Disk Array Control” is “the same as RAID, or Redundant Array of Independent Disks, and is eligible if used *with* an eligible component.” (Emphasis added). The same list states, however, that RAID disk drives are eligible only if used *in* an eligible component. (Emphasis added).

The determinative issue, therefore, is whether the SLD meant that the RAID had to be used “with” the eligible component or “in” the eligible component or whether the SLD did not really intend any distinction between the two words at all. This matter, we contend, represents the classic case of a distinction without a difference. Surely the specific hardware’s functionality and not its geographical location is the issue upon which E-rate eligibility should turn, especially in a high-tech environment where distance means absolutely nothing.

The single most important fact is that Western Heights made it perfectly clear to the SLD that it intended to use the 650Fs as an integral part of its web server solution. According to the SLD, an eligible web server “stores document files and displays them to users when accessing the server.” *See Eligible Services List*. In the Western Heights web server configuration, web server functionality is distributed over three boxes, processing in one, document storage in another, and tape backup in the third. Document files are stored on the 650F and displayed to users when accessed by authorized users. Thus, the 650F, as Western Heights intended to use it, unquestionably satisfied the SLD’s tests for an eligible “RAID.”

Does the 650F also satisfy what may or may not be a more narrow “used *in* an eligible component” test? We contend that it does. In this instance, the only logical conclusion we can draw is that the issue of “in” versus “with” is insignificantly semantic. Apparently, the SLD itself could not decide or, more likely, did not care about which word to choose. “In” or “with”? Certainly the word “with” makes more sense. Perhaps what the SLD really meant to say was “in conjunction with,” as that term certainly would make the most sense in a networking context.

Did Western Heights clearly intend to use the 650Fs “in conjunction with” eligible web server processors? Yes it did, and furthermore, because in this configuration the 650F and the web server processor are so closely integrated that they operate together

as a single, unified web server, we would contend that the 650F will be used “in” an eligible component within the meaning of the SLD’s definition.

Accordingly, we urge the Commission to reverse the SLD’s decision and to fund fully this FRN. [Alternatively, if the Commission decides to adopt one of the SLD’s eligible “RAID” definitions over the other and to construe it very narrowly against the school district, we ask the Commission to suspend the SLD’s 30 percent rule and to fund the portion of the FRN that is undisputedly eligible. To hold otherwise would be unfair in these circumstances, as the purpose of the rule, to discourage applicants from filing for ineligible services, would not be furthered.]

Issue B. Alternatively, whether the SLD should have funded the RAID device as a web server or an integral web server component.

The Commission, we believe, never intended the question of “internal connections” eligibility to turn on the number of pieces of hardware that an applicant decides to integrate together to perform an otherwise eligible network function. Therefore, for E-rate eligibility purposes, it makes no difference whatsoever whether an applicant decides to use one, two, or even three boxes worth of hardware to create E-rate eligible web server functionality. Accordingly, for the reasons discussed in more detail below, Western Heights’ multi-box web server configuration is eligible for support as an “internal connection,” and all of the component hardware should therefore be funded in full.

1. The test for “internal connections” continues to turn on what the applicant certifies a piece of network hardware *will do*, rather than on what the hardware is *capable of doing*, in the applicant’s network.

Any given piece of electronic equipment may have numerous capabilities, some of which perform eligible functions and others of which do not. A “computer” is a perfect example. Depending upon how an applicant configures and uses the computer, it could be, for example, an eligible web server, an eligible “PC Attendant Console,” or an ineligible workstation. *See* SLD Eligibility List. How the component will be used in the applicant’s network, therefore, was, is, and continues to be the key to its eligibility. In

Request for Review by Solomon Schechter Day School Boston, Massachusetts, File No. SLD-132804, CC Docket No. 96-45 and 97-21 (Com.Car. Bureau, rel February 20, 2001), for example, the Commission stated that “under our rules and program precedent, certain components within WAN applications...may be eligible depending on the nature of their use” and remanded the case to the SLD to examine the use of the components at issue.

Therefore, as the test for “internal connections” unquestionably turns on what the applicant certifies a piece of network hardware will do, the fact that Western Heights clearly explained to the SLD that it intended to use the 650F to provide web server functionality, which is eligible, rather than data storage, which is ineligible, should have ended the inquiry right there. If due diligence required the SLD to ask for additional certifications to this effect, it certainly could have requested one.

2. For E-rate eligibility purposes, it makes no difference how many pieces of integrated hardware operating together it takes to perform an eligible function.

In establishing the Schools and Libraries Program, the Commission accorded schools broad discretion to “make their own decisions regarding which technologies would best accommodate their needs, [and] how to deploy those technologies...”¹ Therefore, as a “technology neutral” program, the Commission should not adopt policies that encourage one type of eligible solution over another. As technology continues to evolve and as network hardware becomes increasingly specialized, to restrict an applicant to single-box solutions would do exactly that. For example, Western Heights could have opted for a single-box web server solution by including internal RAIDs, but that solution would not have been the most effective from either a cost or technological perspective.

¹ *Report and Order*, CC Docket No. 96-45 12 FCC Red. at 9019.

As discussed above, it is well established that E-rate eligibility turns on the functionality of the hardware solution as a whole. Thus, how many individual pieces of hardware it takes to create that eligible functionality is irrelevant. It follows logically, therefore, that two pieces of equipment that an applicant integrates together to perform an eligible function must both be eligible, even if one or even both standing alone would not be.

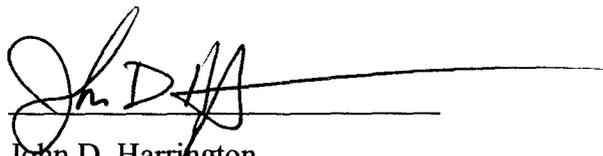
In the configuration at issue here, the 650F and the web server processing unit will be integrated together to operate as a single, unified web server. As web servers are eligible for E-rate support, the SLD could have funded Western Heights request for this reason as well. We request, therefore, based on the record before it, that the Commission find the 650F to be eligible for support either an eligible web server or as a component thereof.

IV. Relief Sought

Western Heights requests that the funding decision of the SLD in FRN 429028 be reversed, processed, and funded consistent with published SLD eligibility standards under which web servers are clearly eligible for support.

Respectfully submitted on behalf of
WESTERN HEIGHTS PUBLIC SCHOOLS

By:



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Edmond, OK 73034
(405) 341-4140

cc: Joe Kitchens
Western Heights School District I41