Nearly \$500,000 grant set to expand opportunities for adult learners across West Virginia

News from the West Virginia Higher Education Policy Commission

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NEWS RELEASE

CHARLESTON, W.Va. *(For immediate release: Tuesday, December 2, 2014)* – A grant from the U.S. Department of Agriculture's Distance Learning and Telemedicine grant program is positioned to expand online learning opportunities for adults in West Virginia seeking to complete a Regents Bachelor of Arts (RBA) degree. Through the \$499,991 grant, which was awarded to the West Virginia Network (WVNET), students will be able to participate in live video classes from the convenience of their laptop or tablet using a web conferencing system.

"We have placed an increased emphasis in West Virginia on helping adult learners complete postsecondary education," said Dr. Paul Hill, Chancellor of the West Virginia Higher Education Policy Commission. "Nearly 20 percent of adults in West Virginia have some college credits but no degree. There can be an array of roadblocks for adult students, but with flexible options through distance learning, we can help them succeed."

Currently, RBA students can complete online components of a course at a time and place of their choosing, in addition to attending classes in person. Through this grant, the West Virginia Remote Online Collaborative Knowledge System (WVROCKS) will launch a hybrid model for distance education by including synchronous video classes – making courses that require labs or discussion available online and accessible across the state.

WVROCKS, an initiative of the Commission, is a statewide portal designed to facilitate the completion of the RBA degree, providing students with flexible options for enrolling in online, condensed, upper-division courses through the state's public institutions.

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FROM THE DIRECTOR

A wonderful thing just happened at WVNET. Four years ago, then Chancellor Brian Noland asked WVNET to reach out to the 168,000 people in West Virginia who went to college but dropped out before they received their degree. Many were back home and working full-time jobs which made it very difficult for them to continue their education.



WVNET was very fortunate to have the assistance of two truly brilliant people, Dr. Roxann Humbert and Dr. Mary Stewart. Together, they created WVROCKS which stands for the West Virginia Remote Online Collaborative Knowledge System.

WVROCKS is an online website where our colleges can list their online classes. These former students can sign up to work towards a Regents B.A. degree by taking their remaining classes online. They can do this in the evening and on weekends without leaving home or giving up their current jobs. Hundreds of former students have signed up and now have a chance to earn their degrees from a college of their choice in West Virginia.

The wonderful thing is that WVNET has recently been recognized by the federal government for this effort. Senator Manchin just announced that we will receive almost \$500,000 in grant funding to expand WVROCKS. This will allow Dr. Humbert and Dr. Stewart to purchase equipment so that they can expand the type of courses offered. Please join me in thanking these dedicated people for doing so much to help make West Virginia shine!

CUSTOMER SATISFACTION SURVEY And this month's winner is...



As you've seen from previous newsletters, we continue to listen to our customers as they tell us how we are doing as an organization and advise us with ways to improve the service we provide.

This month, WVNET would like to recognize Randall Kocsis who works with District 1 Enforcement with the Department of Natural Resources.

Randall was impressed with our 24/7 Network Operations Center, commenting that he was "Glad to receive assistance on a weekend in a very timely manner." Indeed, WVNET's NOC is open 24/7, 365 days a year. In Randall's case, he is involved with the Office of Technology in Charleston who has a Monday thru Friday helpdesk from 7am until 5pm, however after hours and on weekends their calls are routed to WVNET. This is a very important service to the State of WV's public employees, so WVOT and WVNET contracted together to make sure that their customers can get help whenever they need it.

As always, at the end of every month, we will draw a winner, contact them by email, and share items of our appreciation in the way of WVNET memorabilia. Please complete our survey by looking within the incident email of any interaction that you have had with us. All comments are taken seriously and help to improve what we do on a daily basis.

Thank you again, Randall, and thanks again to all our customers who continue to shape and improve WVNET!! (Guest article by Booker Walton, NOC Manager, pictured.)

WVNET ACCOMPLISHMENTS - 2014

WVNET accomplishes a lot in a year. We have multiple teams working on initiatives to improve our services to West Virginia education. Each year, we look through our many tasks and make a list of the most innovative accomplishments. You may have read about some of these in previous newsletters. As we conclude another amazing year, here is our list for 2014.



West Virginia Higher Education Technology Conference 2013

WVHETC 2013 was held October 28-29, 2013, in Morgantown, WV. The theme "Trending Technologies and Community Engagement" offered participants an opportunity to engage in discussions about the

ways in which collaboration and social engagement enhance learner outcomes, retention, self-efficacy, and workforce preparedness in higher education. Over 200 people attended the conference that featured thought-inspiring keynote speakers, 60+ concurrent sessions, tantalizing and plentiful regional cuisine, and the latest technological advances demonstrated by exhibitors, and networking with educators from all of West Virginia.

WVNET Disaster Recovery Site

WVNET took a significant step towards avoiding interruption of service or loss of data by building duplicate copies of our data storage and computer systems. A NetApp 50 TB disk storage array and a Cisco UCS Rack Server (Computer System) were brought to life in another data center in Charleston by WVNET. As a result, WVNET has duplicate computer systems and data in both northern and southern West Virginia, both attached to our 10GB fiber ring. Using a process called replication the two sites stay in sync at all times. Thanks to this effort, either site could be completely destroyed without data loss.

WVNET Became an Approved Google Glass Developer

WVNET's Media Services team became an approved Google Glass Developer and was given early access to this amazing new device and plans to develop educational applications for both students and teachers. Google Glass, a wearable voice activated Android computer with an optical head-mounted display, microphone and camera can get instant access to lesson materials for students to helping teachers present those materials in more interesting and interactive ways. The potential of Glass for education is enormous. WVNET is exploring ways that we can leverage this cutting edge technology to improve education in West Virginia.

WVNET Lowered Price Point for Internet Access, and will do it again in January 2015

For the 6th time in 2 years, WVNET lowered its prices for Internet access. In January 2014, the price was lowered to \$19.95. In January of 2015, WVNET will further lower its price to \$9.95 per megabit per month, more than a 50% reduction. WVNET constantly strives to find ways to drive down costs so savings can be passed on to customers.

\$28,765 Grant Awarded to Help Improve Quality of Online Courses

A grant of \$28,765 allowed the West Virginia Network and the West Virginia Higher Education Policy Commission to provide training to faculty on how to improve their online courses to meet Quality Matters' standards. Dr. Roxann Humbert, Statewide Director of Higher Education eLearning, was the grant project director. Through the grant, training was provided in either a half-day face to face or two week online format for twenty faculty currently teaching online from each of the colleges and universities affiliated with Quality Matters (QM).

WVNET Help Desk Recognized for Standard of Excellence 2014

WVNET's Help Desk was recognized by the industry leader in help desk standards, HDL, as having a team certified in their training skills. The HDI Team Certified Award recognizes teams for their commitment to service excellence through the adoption of best practices and the acquisition of enhanced skills and knowledge.

WVNET Recognized by AIR.U

AIR.U was very proud to have partnered with WVNET to accelerate the deployment of next generation networks in educational communities and across West Virginia through the development of sustainable high capacity broadband networks leveraging White Spaces technologies. The first AIR.U network on the campus of West Virginia University was deployed and is managed by AIR.U co-founder Declaration Networks Group, Inc. (DNG) and is connected directly to the West Virginia Network (WVNET) for fiber optic access to the Internet. *"This innovative approach to extend fiber networks utilizing White Space technologies will dramatically increase access to reliable, high speed internet services for WVNET customers across West Virginia,"* said Bob Nichols, CEO of Declaration Networks Group, LLC.



WVNET Received National Recognition for SDN MOOC

Quilt member West Virginia Network (WVNET) created and presented a Massive Open Online Course (MOOC) about Software-Defined Networking (SDN) on COURSEsites by Blackboard. Entitled SDNOPS, this was the first MOOC ever to teach SDN using an interactive lab component and was recognized by top5onlinecolleges.org as one of the "99 Best Resources on Open Courseware and MOOCs," coming in 11th in the company of Harvard, Stanford, Ed-X, Coursera and other outstanding online course sites. The primary goal of the course was to provide practical knowledge and practical application, or as WVNET Director Judge Dan O'Hanlon likes to say, "See one, create, one, and teach one."

WVROCKS Featured in Fairmont State University Press Release

West Virginia's Remote Online Collaborative Knowledge System (WVROCKS) powered and staffed in part by WVNET was featured in a Fairmont State University press release (March 2014) about their Regents Bachelor of Arts degree program. The article leads with the statement that "Through the WVROCKS initiative launched by the West Virginia Higher Education Policy Commission, adult students at Fairmont State University have found greater success in completing a four-year degree."

Gatekeeper Helps Track Student Attendance

WVNET released a new application called Gatekeeper that tracks student attendance using fingerprint scanners and other forms of identification. The application is currently being used in some K-12 schools to streamline student arrivals and departures, provide teachers with an attendance dashboard, and create attendance reports needed by the schools.

Deploying Super WI-FI Technology

WVNET received wide recognition in an article in Diverse: Issues in Higher Education on April 24, 2014. In his article on "Deploying Super WI-FI Technology." WVNET Director Dan O'Hanlon is quoted in the article, saying "The state's experience of wiring some 1,068 'community anchor institutions' with high-speed fiber optic cables has convinced me that state leaders should consider an alternative to wired broadband. West Virginia is using much of a federal stimulus grant to pay for a \$42 million 'last-mile' network that connects the Internet to Institutions, such as the state's K-12 schools, health clinics, public colleges, courthouses and other public facilities, with high-speed fiber. The entire state is mountainous and that brings enormous challenges with trying to bring broadband to [homes and organizations]. Additionally, the [state] population of 1.8 million people is very widely dispersed." O'Hanlon believes that "last-mile wireless in the end will be a large part of the solution to bringing broadband to places like West Virginia that are very rural." Notes O'Hanlon: "The universities will be the engines that help bring up (wireless connectivity) to West Virginia in a timely and economical manner, and they certainly have proven themselves so far."

WVNET NOC Now on Facebook and Twitter

WVNET's Network Operations Center moved into the social media realm by creating a Facebook and Twitter account. The HDI Team Certified group is attempting to reach out to the customer by giving them more avenues to interact with the Help Desk staff. NOC Manager Booker Walton comments, *"This is another way for us to reach the customer base by quickly disseminating important information, to create interest and bring knowledge on a variety of different computer related topics, and overall to create transparency in everything that we do here at WVNET. I view this as an alternative way to reach large groups of people without them having to place a phone call. Today, people are using alternative forms of communicating rather than just email, and we want to place ourselves now, and in the future, to be able to meet the customer at their desired communication media." You may follow the WVNET NOC Facebook Page at: http://www.facebook.com/wvnetnoc And the Twitter Feed at: @wvnet_noc If you would just like to get the text message version of our Twitter updates, you can sign up via SMS: Text follow wvnet_noc to 40404. Standard text messaging rates will apply.*

West Virginia Statewide Technology Conference (WVSTC) 2014

Over 500 people attended this year's West Virginia Statewide Technology Conference which was held at The Waterfront Hotel in Morgantown, West Virginia, on July 15-17. Attendees mostly from K12 with a mix from higher education and various state agencies chose from a varied selection of 142 concurrent sessions and pre-conference sessions. The theme of this year's conference was Full Steam Ahead! Margo Day, Vice President, U.S. Education, Microsoft Corporation, was the opening session keynote speaker and Illah Nourbakhsh was the keynote breakfast speaker and spoke on *"Technology for Educational Empowerment."* Mr. Nourbakhsh is Professor of Robotics, Director of the Community Robotics, Education and Technology Empowerment (CREATE) Lab and head of the Robotics Master's Program in The Robotics Institute at Carnegie Mellon University.



WVOT Signs MOU with WVNET

WVNET and the WV Office of Technology have worked together on various projects for the betterment of public entities in the State of West Virginia for years. The Office of Technology and WVNET have furthered their relationship with a Memorandum of Understanding that became effective July 1, 2014. This MOU solidifies the relationship between the two major technology organizations, publicly acknowledging the benefits provided to each other. The document details after hours help desk support by WVNET for the Office of Technology, as well as outlining telecommunications and network security information between the two offices. This document is an outward symbol of the expanding, positive relationship between the two entities and recognizes increased cooperation and collaboration.

Argos Snap Shot

WVNET now hosts Argos for 14 of the network's 24 member institutions with more planned. The schools, particularly those that had been using straight SQL to build their reports, have dramatically increased the number of reports they are able to produce, all the while saving time and money. WVNET implemented Argos in April 2012. Evisions' Argos Enterprise Reporting Solution had already become the go-to reporting tool at many of WVNET's member institutions, so choosing Argos as the network's primary reporting tool was a no-brainer. Since Argos offered the ability to host the solution centrally on WVNET servers, while allowing licensed schools to access the tool via the cloud, it was and continues to be a good fit for WVNET's needs.

Customer Service Survey Starts Monthly Giveaway of WVNET Memorabilia

WVNET began including a customer service survey in every email from our OZ tracking system. Customers can complete the survey to let us know how we are doing and if we can improve our service. Customers who take the time to provide a response to the survey will be entered into periodic drawings to win different prizes.

WVNET Staff Members Continue to Train Up and/or Serve as Ambassadors for WVNET

WVNET's Manager of Applications, Dana Keith, has been elected to serve a two-year term as a Member at Large for the West Virginia Association for Institutional Research. WVAIR has been reformed after many years of dormancy and has become a central collaboration of institutional researchers and institutional analysts representing every public higher education institution in West Virginia.

WVNET Applications staff member, Barbara Long, has been appointed to the Ellucian DegreeWorks Customer Advisory Board serving the DegreeWorks community for a term of one year through June of 2015. This competitive appointment was based on recommendations from peers in the community, reviews with Ellucian staff with whom she has interacted, and her essay answers to a series of questions that included her vision of how the product should support retention and student success.

WVNET Applications staff member Barbara Long was awarded a complimentary registration to SIGUCCS. The award covers complimentary registration to the track of her choice (either the Management Symposium or the User Services Conference), one pre or post conference workshop and up to 3 nights at the conference hotel. This year's conference will take place November 2-7, 2014, in Salt Lake City UT, and is centered on Build Your Own Destiny. SIGUCCS is an association of professionals who support and manage the diverse aspects of technology services at higher education institutions.

TV White Spaces

At the October Create West Virginia Conference, WVNET, Glenville State College, and DAS Advisers partnered with the Conference to demonstrate TV White Space, the old television broadcast spectrum being repurposed to deliver broadband to the most remote places on the planet. This gave a cross section of creatives in business, education, technology, and community design a heads up, and potentially, an early crack at accessing and gaining some local control of this evolutionary use of a known resource. WVNET is now pursuing several more TV white space deployments around West Virginia. In partnership with the City of Huntington and Marshall University, WVNET is bringing free white space to the downtown area. Huntington has plans to offer it citywide within two years. Further, WVNET is partnering with the State Department of Education to deliver white space broadband to every K12 school in the state. We are also exploring partnerships with Microsoft, Google and another major TV white space company to bring this cutting-edge technology to the furthermost regions of West Virginia.



WVNET Pitches URCast to the FCC

Two WVNET employees, Booker Walton and Randy Long, visited Washington, DC, for a meeting with the Federal Communications Commission. This meeting was part of a broader project WVNET is working on in coordination with TV Band Services (TVBS) in an effort to make caching services part of the E-Rate Eligible Service List for the 2015 Calendar Year. TV Band Services has developed a caching service called URCast which reduces WAN usage in schools by placing a caching server inside of the school, allowing instructors to place content in the software's MessageCenter and then giving students access to download lessons quickly and without class disruption on a daily basis. This service has dropped WAN bandwidth usage significantly by using the LAN infrastructure already in place to deliver content to the student's device (i.e., desktop, laptop, and any mobile device). Walton and Long were joined at the FCC by two top officials from TVBS, Chief Operating Officer Chris Cooney, and Wireless Communications Executive William Seiz. This was the third such meeting between TVBS and the FCC, striving to achieve E-Rate eligibility for caching services as well as helping structure the definition. Within the next few weeks, the Federal Communications Commission should be announcing the E-Rate eligible services.

West Virginia Higher Education Technology Conference (WVHETC) 2014

West Virginia Higher Education Technology Conference (WVHETC) 2014 was held at The Waterfront Hotel in Morgantown, West Virginia, on October 27-28. Two hundred fifty attendees participated in this annual conference that brought together higher education, K12 and state agencies for a common purpose, that of embracing new ideas, developing new insights, and designing new approaches to help move education forward in the state. Three keynote sessions, a general session on white spaces, 57 concurrent sessions and 11 poster sessions comprised most of the schedule. Dr. Marjorie Darrah, Wanda Baker, Senator Robert Plymale, and Microsoft's Paul Garnet were primary speakers at the conference.

Data Warehouse Development

The WVNET Applications Group successfully developed a data warehouse model and Argos dashboard on Student Enrollment and Course Utilization for Mountwest CTC and Northern CTC. This model is designed so additional institutions can be added to the model and all reports developed against the model are useable by other modeled institutions.

Imperva Deployed

The WVNET Applications Group has deployed Imperva, a database usage monitoring application, to insure the activity of the databases running at WVNET is appropriate and anything detected as inappropriate is blocked. This is the first of a series of security applications and processes being implemented to insure the data hosted at WVNET is safe.

P20W Data Warehouse Rebuilt

WVNET rebuilt the P20W data warehouse from scratch after determining that the previous model was flawed in design and implementation. WVNET further rebuilt all of the reports to utilize the new model and worked with the Higher Education Policy Commission and WV Department of Education to build reports on the P20W data system to answer strategic questions posed by each agency.

Assisted Ellucian Consultant

WVNET facilitated the work of the Ellucian Consultant in the merger of Bridgemont CTC with Kanawha CTC into Bridge Valley CTC.

Processes Build

WVNET is building the processes to separate Pierpont CTC from Fairmont University. This on-going effort will insure that Pierpont CTC has clean data of their students by Spring of 2015.

System Backups Moved from Tape to Disk Storage with Off-Site Replication

WVNET upgraded our Tivoli Storage Manager server and at the same time moved from tape storage to all disk storage. The storage is automatically replicated to disk storage in our Charleston data center where a standby TSM server is available for restore requests if needed. We also lowered TSM costs to our customers, allowing them to create their own backups with disaster recovery.



WVDE Migration to Office 365

WVNET worked with the West Virginia Department of Education in their migration from Oracle Communications Messaging Server to Office 365. WVNET installed and configured multiple virtual machines to host Active Directory that is used to replicate to Office 365. WVNET staff has worked closely with WVDE in setup and configuration as well as assisting with resolving all issues. We will continue to work with the WVDE to expand this effort to provide additional services and support.

Upgrade Storage Area Network Technology

WVNET is currently undergoing a large SAN infrastructure upgrade to provide better quality and service of our storage network. This upgrade will allow us to dynamically add additional resources to our SAN in terms of storage and performance capabilities. It will also allow us to be prepared for future migrations.

NETAPP Insight 2014 Conference

WVNET staff attended the NetApp Insight 2014, the first NetApp conference to invite customers. Attending this conference allowed staff to communicate directly with multiple NetApp engineers and customers to better understand how these systems are being used by others and how WVNET can improve performance.

Security Diligence against Vulnerabilities

2014 was a year in which the computer industry has discovered multiple vulnerabilities across a variety of platforms. The WVNET systems staff have been diligent in keeping systems appropriately patched to ensure that these vulnerabilities do not affect us or our customers. We have also been working with our customers to educate them so that they understand the need for security and proactive support.

Conversion to wvOASIS

The WVNET Business Office successfully converted to wvOASIS, the new statewide financial system. Along with this, they also created a new chart of accounts based on wvOASIS. The chart of accounts was loaded into Banner, saving WV Higher Education Institutions substantial time and effort.

wvOASIS Interfacing

WVNET's Interface team completed significant tasks related to wvOASIS, including interfacing and deployment of wvOASIS with FIMS, GAX, Manual Warrant, and PCARD. We also completed substantial report writing, saving institutions time and effort until payroll is established from EPICS to wvOASIS.

FY14 Audit

WVNET successfully passed a comprehensive financial and operational audit.

WVNET Offers Digital Learning Resource Package

WVNET continues its tradition of leveraging public resources to provide feature rich, efficient, cost saving solutions and resources for education and government in West Virginia. In an effort that saves institutions thousands of dollars, WVNET began offering the Digital Learning Resource Package which includes Big Blue Button collaboration tool, Helix Streaming Media Server and 1 terabyte of storage.

On-Demand Training Server

WVNET created a Blackboard instance to provide statewide on-demand access to training. Not only can this instance provide training for nearly any subject, but it customizes the training to local standards and configurations. Unlike generic training available at other internet sites, this training shows exactly how to work with resources being used by West Virginia institutions.

\$500,000 Grant Awarded to WVROCKS

A grant from the U.S. Department of Agriculture's Distance Learning and Telemedicine grant program is positioned to expand online learning opportunities for adults in West Virginia seeking to complete a Regents Bachelor of Arts (RBA) degree. Through the \$499,991 grant, which was awarded to the West Virginia Network (WVNET), students will be able to participate in live video classes from the convenience of their laptop or tablet using a web conferencing system.



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ARGOS WORKSHOP

WVNET in an ongoing effort to Enhance Education through Technology organized and sponsored an Argos Workshop hosted by WV Northern Community College in Wheeling, West Virginia. The workshop was attended by six West Virginia Institutions: West Virginia State University, Shepherd University, Bluefield State, West Virginia Northern Community College, Eastern Community and Technical College, and University of Charleston.



This event allowed the participants to focus three days to accomplish a set of reports, data blocks and general data solutions to help their respective campuses achieve success for their students. Institutions attended the workshop with plans to build information solutions for Admissions, Financial Aid, Student Retention, Instruction Cost and Enrollment.

WVNET provided an Argos expert from Evisions to attend the workshop to provide immediate technical support to insure the workshop maximized the time and effort of the attendees. Attendees included functional area specialists like Financial Aid, Finance and Registration along with technicians from IT and Institutional Research.

On the final day, each team made a presentation of their efforts and showcased something they learned while attending the workshop. In every case, each group made substantial progress and some presented completely polished results to take back to their campus and publish.

WVNET will sponsor another workshop the third week of May 2015 (May 19-21) with a location to be announced. This will be the third workshop that WVNET has hosted. WVNET is proud to have leveraged licensing of Argos from Evisions and to host the service for higher education in West Virginia. We are happy to reach out to the University of Charleston with this offering as we continue to help institutions help themselves through information and technology. Using a tool like Argos provides institutions with access to data to provide informed decisions about the operational levels of their respective institutions. Workshops like these encourage collaboration and joint effort between functional and technical institutional staff as well as to create sharing and collaboration between different institutions. "We are all here to help our students graduate and have the educational foundation for their future success. This workshop is one way to garner the information needed to insure our students have the best chances for success." said Dana Keith, Manager of Applications at WVNET at the conclusion of the workshop

WVNET MANAGER OF OPERATIONS EARNS CERTIFICATION



WVNET's Manager of Operations, Booker Walton III, has earned a Certified Data Center Management Professional (CDCMP®) credential and qualification from CNET Training. CNET is the only dedicated data center training provider in the world to award both industry recognized qualifications and official certifications for their professional programs, allowing program participants to enhance their industry skill sets and their professional credentials. This achievement verifies Booker as having knowledge of data center management that is up-to-date and in-line with

the industry and the ever-evolving technical changes within it. He has made a commitment to life-long learning and will refresh this certification every few years. "This was very difficult to complete, and it has greatly improved my understanding of how to manage WVNET's data center both now, and in the future." comments Booker. Congratulations Booker Walton III, CDCMP!

