

# NETWORKING 101

WEST VIRGINIA NETWORK (WVNET)



Dan O'Hanlon



## West Virginia Statewide Technology Conference

**From the Director** — I am so proud of WVNET right now! We have just finished putting on a terrific Technology Conference for K12. From start to finish it was a smashing success.

It began with a tribute to two people who have done so much for educational technology in West Virginia: Senator Jay Rockefeller and Brenda Williams. Both are retiring after decades of service to this State. Senator Rockefeller gave a rousing 'thank you' presentation that inspired all of us to continue the effort to bring the benefits of technology to students all over West Virginia. And the heartfelt tribute to Brenda from School Board Member Lloyd Jackson had us all choked up a bit. **THANK YOU** to both of them for all they have done for our children!

These tributes were followed by a keynote address from former Governor Bob Wise. He then joined a panel including WV School Board members Lloyd Jackson, Wade Linger, Mike Green and Superintendent Dr. James Phares. Social media and the Internet were used to deliver questions in real time to the panelists.

WVNET staff worked with Dept. of Education staff to put on over a hundred high-quality sessions for almost 500 attendees. I heard rave reviews from many attendees about how useful these sessions were to them. Special thanks go to conference organizer Karen Saffron who fell and cracked two ribs the day before the conference but still showed up every day to make sure everything worked as planned.



Senator Jay Rockefeller



Bob Wise—Opening Session



Lloyd Jackson—Brenda Williams



Opening Session Panel




Dan O'Hanlon-Bob Wise

### VOLUME 3, ISSUE 8

### AUGUST 2013

#### In this issue:

From the Director — WV Statewide Technology Conference 2013 Wrap Up with pictures	1
WVSTC 2013 Pictures Continued	2
 SDNOPS MASSIVE OPEN ONLINE COURSE	3

WVHETC 2013	4
Bonnie and Rich Lynch Retire	4
WVNET Schedule of Rates	5
Featured Service—Spam & Virus Filtering	5
Employee Spotlight Dianne Sisler	6
Employee Spotlight Ron Hamilton	6
Argos Report Writer Training	7



Chancellor Paul Hill

#### Continued from above...

Finally, Chancellor Paul Hill kicked off the final session with a talk about the value of collaboration between Higher Education and K12.

This was followed by a panel moderated by Dr. Jan Fox and included Drs. Eagle and Schrum, Deans respectively of the College of Education at Marshall and WVU. This unprecedented joint appearance emphasized the value of collaboration between their two colleges and was very well received by the audience.

All in all, it was a truly incredible conference. My thanks go out again to Karen and the Media Services Group at WVNET, and to John Miller, Brenda Williams, Brenda Morris and Julia Legg and their team from the Department of Education for a great job.

We'll see you all next year!! ~Dan O'Hanlon, Director



## West Virginia Statewide Technology Conference



Dr. Jan Fox

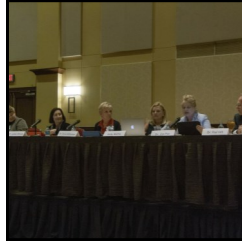


# West Virginia

## Statewide Technology Conference



Drs. Teresa Eagle-Lynne Schrum



Closing Panel Speakers



Vendor Exhibit Area



Vendor Exhibit Area



WVSTC2013 Registration



Pre-Conference Session



Closing Session Luncheon



Session on Help Desk



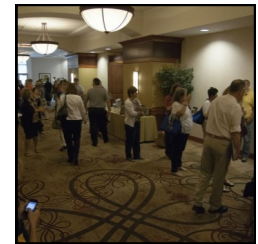
James Wolff, Dan O'Hanlon, Bob Wise



Prizes by Karen Saffron



WVNET Exhibit



Casual Moments



## West Virginia

### Statewide Technology Conference

### Post Conference Survey Responses

*"I was provided with many tools that I am able to incorporate into the classroom."*

*"I learned many new things to use in my classroom with my students to enhance my learning."*

*"Great facilities, well attended and organized."*

*"Good location and facilities. I thought the Conference was well organized, and the duration of the event was appropriate."*

*"I loved having a face to face conference again. Please please please continue doing this. It was wonderful."*

*"Good to hear some new information and see some people that have good ideas."*

*"I wish I had known about this sooner. I would loved to have attended in the past. I found so many useful things that I could use in my classroom."*

*"The social event was great. All the staff were helpful and friendly. The sessions I attended were put together by knowledgeable people in their fields."*

*"Interesting topics and a lot of variety. Heard good comments from a few teachers that attended and what they could take back and apply to the classroom. Also many good comments from the Vendors that participated."*

*"The variety of sessions was great. I enjoyed the vendor booths very much."*

*"Great sessions with enthusiastic presenters."*

*"It was nice having the opportunity to talk to teachers from other parts of the state and share how they were using technology."*

*"I attended the conference as an exhibitor, and the individuals working the exhibit area for the conference was terrific! Everyone was extremely helpful."*

*"I always come away with useful information from this event."*



*Software Defined Networking/OpenFlow is emerging as one of the most promising and disruptive networking technologies of recent years. It has the potential to enable network innovation and create choice, and thus help realize new capabilities and address persistent problems with networking. It also promises to give network operators more control of their infrastructure, allowing customization and optimization, therefore reducing overall capital and operational costs. Industry is embracing SDN. Network operators plan to build their infrastructure using this innovative technology. Previously, we mentioned that HEPC Chancellor Dr. Paul Hill called WVNET Director Dan O'Hanlon to congratulate us about this MOOC and Dan told him we decided to teach a MOOC so that we would be ready to help our community and technical colleges and 4-year schools when they were ready to offer MOOCs. Vice Chancellor Rob Anderson was also very complimentary. Recently, WVNET found itself in the company of Harvard, Stanford, Ed-X, Coursera and many other outstanding online course sites. Our Media Services Group, headed by Mike Karolchik, did outstanding work getting the MOOC on Software Defined Networking online and working. Mike was ably assisted by Dr. Mary Stewart, Jonathan Lynch, Chris Reed, Josh Friend and Justin Robinson. For your enlightenment, we are publishing below the MOOC stats comparison based on completion rates and course evaluations as of 8/7/2013.*

#### **MOOC STATS COMPARISON BASED ON COMPLETION RATES AND COURSE EVALUATIONS AS OF 8/7/2013**

- ◆ 71% of those who completed the course took the time to complete the course evaluation
- ◆ 80% of the students who completed the course evaluation agreed that the course design was clearly articulated in the course introduction
- ◆ 100% agreed that the articles and content links were appropriate to the course outcomes
- ◆ 80% agreed that the Lab Lectures provided the necessary information to complete the practice labs
- ◆ 100% agreed that the tools and resources provided in the course helped students achieve the course learning objectives
- ◆ 100% agreed that the course components were universally designed for access to all students
- ◆ 80% stated that they would enroll in another MOOC of the same design offered by WVNET, and 80% agreed that they enjoyed the course

Only 49% of the 173 registered SDNOPS users on CourseSites actively engaged in the course. Eight percent of those students completed the course by earning all of the eight badges which is on par with the best MOOCs in the world, and well above the average completion rate of all MOOCs at 5%.

A typical MOOC offered on Coursera by the University of Edinburgh (2013) reported only 17% of their total registered users as actively engaged with content, and only 5.6% unique users posted in the course forums.

Another Coursera MOOC on "Computational investing, Part 1" (2013) reported that of their enrolled students, 53% watched a video (interacted with content), 26% took a quiz, 12% submitted the first homework assignment, and only 4.8% completed the course.

A total of 91 badges were awarded throughout the SDNOPS MOOC.



## Trending Technologies and Community Engagement

The Call for Proposals for the West Virginia Higher Education Technology Conference has been issued. **WVHETC will be held October 28-29, 2013 at The Waterfront Hotel in Morgantown, WV.**

At one point in time, technology imposed barriers to education, however now, with expanded access and affordability, the tide has turned, and technology is actually breaking down the barriers to education. The WVHETC 2013 theme, *'Trending Technologies and Community Engagement,'* offers 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. Community engagement offers a variety of ways to deliver education by matching people, resources and technology to achieve common educational goals. Furthermore, advances in technology have allowed educators to quickly develop and implement different teaching and learning analytics, gamification, and mobile friendly technologies. The WVHETC 2013 will focus on the ways in which educators analyze the effectiveness of community engagement and related initiatives as well as the role that technology plays in the process.

The West Virginia Higher Education Technology Conference offers you an opportunity to present your knowledge of relevant topics and welcomes proposals for presentations on a wide range of topics of interest to higher education, K12 and state agency personnel. *Remember, all presenters must register for the conference.*

Here are some suggested presentation categories:

*1 to 1 implementation*  
*Analytics*  
*Broadband access*  
*Collaborative learning*  
*Data interoperability*  
*Distance learning/blended delivery*  
*eLearning*  
*ERP (Enterprise Resource Planning)*  
*Green technology*  
*Internet2*  
*Mobile computing*  
*Policy and law*  
*Robotics*  
*Social networking*  
*Technology funding*  
*Video streaming*  
*Web development*

*Adaptive learning*  
*Banner*  
*Campus safety*  
*Customer services*  
*Digital citizenship*  
*Document imaging*  
*Emerging technologies*  
*Gaming technology*  
*Integrated technologies*  
*Kinesthetics learning*  
*Personalized learning*  
*Professional development*  
*Security and network management*  
*Sustainability*  
*Technology supported learning assessment*  
*Virtualization/cloud computing*  
*Your relevant topic*

Presenters should plan for a session length of 40 minutes, with another 5 to 10 minutes to answer questions. To submit a proposal, use the Call for Proposals Submission Form at <http://wvconference.com>. All proposals must be submitted no later than September 15, 2013. The conference program committee will review all submissions and will contact individuals who are selected to present a session.

We look forward to seeing you at the conference and invite you to submit your proposals now. We are building a fantastic program that covers a broad spectrum of topics that will help push higher education in West Virginia into the horizon of tomorrow. We look forward to working with you in making this another successful conference!

### HAPPY RETIREMENT BONNIE AND RICH LYNCH AUGUST 15, 2013

*While we're sad to see them go, WVNET Director Dan O'Hanlon and staff members celebrated the retirement of Bonnie and Rich Lynch during a special lunch recently held at WVNET. Bonnie and Rich's retirement announcement came after nearly 33 years with WVNET. As most of you know, Bonnie was the Manager of WVNET Administrative Applications and Rich was the Manager of WVNET Systems. Pictured are (left to right) Dan O'Hanlon, Rich Lynch and Bonnie Lynch. Now, mind you Rich, we don't want to be hearing any stories about "the big one that got away" because we all know you'll have plenty of time to go fishing, hunting and trolling Facebook. Seriously, we will miss you both greatly...take care!!*



Dan O'Hanlon, Rich (center) and Bonnie Lynch

## WVNET SCHEDULE OF RATES

Did you know that for a fee WVNET offers each of the following services?

- Virus and Spam Filtering
- Internet access, email, WI-FI access points and managed services
- OZ problem management
- Address cleansing
- Backup services
- Conference management
- Blackboard 9 hosting
- Video conferencing
- Audio and/or web conferencing
- Web hosting
- Co-location and hosting services
- Consulting
- Training
- Other services
- Contracts and more information

Please see our detailed Schedule of Rates document for more information: [http://www.wvnet.edu/documents/WVNET\\_Schedule\\_of\\_Rates.pdf](http://www.wvnet.edu/documents/WVNET_Schedule_of_Rates.pdf)



### FEATURED SERVICE— - SPAM & VIRUS FILTERING

About 99.8% of all computer virus infections come from e-mail. Our experience indicates that between one and two percent of all e-mail is infected.

The computer industry has developed two approaches to virus filtering: one at the PC level and one at the enterprise level.

PC-level protection requires that you install and maintain virus prevention software on every PC. The advantage of this solution is that it not only protects against e-mail infection but also infection from floppy disks, FTP files, etc. However, this approach can also be expensive and very difficult to maintain. The problem is keeping every PC updated. A user may opt to buy virus protection software but end up not keeping it up to date with the latest "signature files," which describe new viruses.

The second approach is to install an enterprise e-mail filter, which looks at all of the e-mail going to one or more e-mail servers. WVNET is currently running this type of virus filtering.

An enterprise e-mail filter has the advantage that it can be maintained at one location, and it protects against the source of approximately 99.8% of all viruses. The virus filtering software we use has been recognized as one of the best available. We get updated virus signatures for any new viruses every hour. There is nothing wrong with using both approaches (i.e., both desktop and enterprise filtering). In fact, many experts recommend that you do this for those administrative PCs over which you have greater control.

The enterprise e-mail filter provided by WVNET protects an institution/agency from external virus infection. We currently use three separate virus scanners to help ensure no infected mail messages get through. It does not protect against infection of one internal user by another internal user. To protect against this type of problem requires the redirecting of internal mail to WVNET for filtering. If you are interested in this additional level of protection, WVNET staff can discuss the pros and cons with you.

Check this out for current WVNET Email Processing Stats and Virus Counts: <http://www.wvnet.edu/services/spam-virus-filtering>  
For related pricing: [http://www.wvnet.edu/documents/WVNET\\_Schedule\\_of\\_Rates.pdf](http://www.wvnet.edu/documents/WVNET_Schedule_of_Rates.pdf)



**EMPLOYEE SPOTLIGHT — —  
DIANNE SISLER :)**

Team member Dianne Sisler, Administrative Applications Software Specialist Senior in WVNET's Administrative Applications Group lives in Preston County on a farm near Terra Alta. Dianne and her husband have two grown children and one teenager. Her oldest is married with a four-year-old girl who also enjoys the farm life. Dianne has a BS and MA in secondary education (science) from WVU and has worked for WVNET since 1998 and the State of West Virginia for nearly 26 years. Dianne became a full-time state employee when she joined the staff at the WVU Financial Aid Office in 1987.

In her Administrative Applications Software Specialist Senior position, Dianne's job is to help users of the Banner Financial Aid module in getting the maximum benefit. Her assistance includes training, testing, trouble-shooting, and generally monitoring how the database is functioning. In her spare time (say what?!!), Dianne is known as the unofficial cookie expert with coworkers serving as tasters. Regarding how technology has changed over the years Dianne has worked at WVNET, she comments that Banner and her personal computer have undergone some changes, but the changes to things like cell phones and tablet computing are most obvious; additionally, some people had cell phones back then but practically everyone has one now and her current smart phone has several times more storage than the computer she owned in 1998.

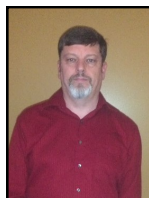
Dianne's hobbies include baking and reading and she is growing an avid interest in writing. She has an interest in nature that stems from growing up on a farm. Her youngest daughter is heavily involved in 4-H which keeps them busy with projects and activities. Goals that Dianne has set for herself are to keep growing with Banner and Argos products and keep abreast of changes to financial aid policies and procedures. Dianne's number one priority is whatever her user's need is at the moment. She likes talking and visiting with her colleagues at the schools and helping them with work with Banner. Dianne dislikes Banner documentation. Regarding WVNET under the new leadership and how it has changed, Dianne feels the atmosphere at WVNET is more optimistic than it was when she first arrived. It has new people who have brought other viewpoints and methods to serve our customers.

Pictured is Dianne's youngest daughter Abby. The picture of Abby is from Terra Alta's WV Day celebration that they called 'Pioneer Days'. They chose a boy and a girl from each grade at Terra Alta/East Preston School by administering a WV history test that was grade-appropriate. Abbyrose had the high score in the seventh grade. All the children got to dress in period costumes and be in a parade and were recognized on a stage by local historians where they were presented a certificate and a t-shirt. Abbyrose has also been busy this summer with 4-H and won first place in the Dog Skillathon at 4-H Days on July 26.



**Abbyrose**

**EMPLOYEE SPOTLIGHT — —  
RON HAMILTON :)**



Meet team member Ron Hamilton, Chief Information Officer for Eastern West Virginia Community and Technical College. Ron is our first employee to be contracted out under CIO as a service by WVNET and is from Washtenaw County in Ypsilanti, Michigan. Ron has an MS in Information Systems from West Virginia Graduate College (Marshall University), a BS in Computer Management and Data Processing from WV Institute of Technology (WVU), and an AAS in Data Processing from Southern West Virginia Community and Technical College. Ron has been with WVNET for two years and has been employed by the State of West Virginia for 30. Ron provides support for BANNER and served as the Lead for the implementation of Argos at WVNET for West Virginia higher education institutions. Ron does database systems analysis, design and development; application development; report development; and his most recent development was the personnel system which integrates with BANNER. This system is used by WVNET, Eastern, and other schools are currently considering the product. Ron is presently working with Dana Keith and Russell McCormack using WhereScape to develop a higher education data warehouse. Ron has also served as a Database Systems Consultant with WVNET.

Since Ron started working at WVNET two years ago, he has seen a concerted effort to provide professional development of existing personnel to educate them on the latest available technologies. He has been the happy recipient of some of this training and will continue to take advantage of opportunities to increase his knowledge and skills. Ron has seen a focus on dimensional database modeling for providing analytics and sees this as a wonderful opportunity for West Virginia to better answer questions and improve the efficiency of services offered to our citizens.

His hobbies and personal interests include tennis, chess, DIY carpenter, member and clerk for the Turkey Creek Old Regular Baptist Church in South Williamson, Kentucky; singing religious songs, spending time with his family (Tammy-wife, daughters Audra and Kyleigh and son Zachary). Under the new leadership, Ron has seen WVNET become re-energized and forward looking. Additionally, he comments that WVNET is trying to be a leader in technology instead of a follower. Ron says WVNET is not afraid to take some risks to better itself and these risks are paying off for WVNET and our customers.



**Dan O'Hanlon, Director**

837 Chestnut Ridge Road  
Morgantown, WV 26505  
304.522.7303

[dohanlon@mail.wvnet.edu](mailto:dohanlon@mail.wvnet.edu)

**Fran Barnes, Editorial Assistant**

[fran@mail.wvnet.edu](mailto:fran@mail.wvnet.edu)



**Fran Barnes**



[Follow @ wvnet](https://twitter.com/wvnet)



Newsletter Archives Here

[www.wvnet.edu](http://www.wvnet.edu)

## ARGOS REPORT WRITER TRAINING

WVU-Parkersburg hosted an Evisions Argos Report Writers Training session June 25-27, 2013, that was attended by several institutions from all over the state. Unlike the Database Designer section of Argos, the Reporter Writer is designed for users who may not be IT professionals but instead perform functional duties in various offices on their campus. By using DataBlocks (sets of information processed by SQL Queries) written by IT staff, users can easily design a multitude of reports without having to worry about database fields, joins, etc.

While attending the Report Writer Training session, we learned how to create simple reports such as CSV extracts to more complex Banded Reports that can be used to produce structured, formatted output. These reports can be executed immediately or be setup to run on a schedule once a year, specific days of the week or several times a day. They can be saved directly to your computer, sent to a printer or even emailed to addresses of your choosing. Letters, such as the ones we currently produce via Banner Letter Generation, can be produced as a Banded Report and can contain many of the formatting options available in document programs such as Microsoft Word. These letters can then be saved as a PDF, sent to a printer, or emailed to users contained in the letters. When choosing PDF, a user can secure the file with a password and choose whether the created PDF can be edited or not. There are many more options available in the Report Writer that we were unable to discuss in the allotted time.

Attendees were also presented with the new Web Viewer functionality which will allow reports to be accessed in a user's native browser. This means that the Argos program will no longer have to be installed to execute a report. Report viewing is no longer limited to Windows PCs but can be accessed on Macintosh computers, tablets and even your smartphones.

After attending this training, I can say that I am even more excited to be using this product and can't wait to start introducing users throughout the Bluefield State College campus to Argos Reporting. I would also like to say Thank You to Ronald from Evisions for presenting such an informative class and for answering the multitude of questions presented to him. I would also like to thank all of the attendees for making this an enjoyable and enlightening experience. Lastly, I would like to thank WVU-Parkersburg for hosting this training session and for providing meals. If not for the generosity of our peers, we would not have the opportunities to further our technological expertise with the various products available to us.



**Delano Sweeney**  
Banner-Oracle DBA  
Banner Technical Support  
Bluefield State College