Pete Deyo

EDMT 627 Tech Coordinator Interview

I met with our district technology coordinator Todd Neibauer at his office in our tech center. The tech center is a convertered former elementary school in our district that received updates and infrastructure to accommodate the servers and cabling just this last summer. It is interesting to see a how the very traditional american elementary school has been gutted and seems to be spilling its intestines all over the ceiling in the lan and power cables that criss cross the building. Its very much like being inside some giant fish that luirs school children to their death by camouflaging itself as a school. The clicks, ticks, and hums give the building a busy and uneasy feeling and it is in this environment that we conduct our interview.

How long have you held your position in this district?

I have been with the district for 22 years but I only moved into the position of tech coordinator 8 years ago, I was formerly an social studies teacher and have taught at both the high schools.

What previous experience did you have before coming to the district?

In technology I had very little. At the time I was hired technology was a small component within the district in regard to computers. As I said I worked as a social studies teacher for most of my career. Now the internet is ubiquitous but at the time the district had a few apple IIgs's at the high school that at that time was our only high school. I had a personal interest in computer related technologies and kept abreast of those technologies in my own time and as they were added to the curriculum I was really excited to try and work with them in my own classes. Not to criticize other

teachers but my own interests naturally lead me into a de facto position tech leadership as I answered other teachers questions. Eventually my place just evolved and when the position of tech coordinator became available I jumped at the chance to continue that evolution.

How would you rate tech support in the district?

I would rate it very highly. each staff member uses a web-based service, School Dude to log their problems. This service keeps a record of technology work orders. To support the needs of online learners there is a need to have an immediate technical support option for staff and students who rely on the online tools (Moodle, etc...). Routine needs will still be handled through the SchoolDude work order system, however, for urgent needs users can call the main technology office. These items will either be resolved by office staff or have the appropriate personnel dispatched. Technicians will use remote assistance tools to expand the types of support they can provide including full remote control. As the online programs grow and with it the number of students who are accessing learning materials at non- traditional times increases, the support hours and/or options may need to be extended but I think we are meeting teacher needs now.

How would you rate computer integration in district classrooms?

Well with the upcoming year we will have a complete one to one computer ratio for all students within the district. Right now the high school has had a few years to test the waters and start to really integrate the use of student computers in the classroom but it is a transitionary period. I think that is is difficult to give an across the board rating with so much variation in access to technology. I would still say that it is really excellent, that teachers are using the tools the district provides and seeking out

and integrating their.

How are decisions made about hardware and software purchases for the district?

We like to involve all our IT staff on decisions about hardware. We have regular meetings and hardware purchases are something that gets dealt with on a pretty regular basis. So, we will talk together about what the needs are for the particular usage case and once we have that list on needs we will shop out for bids with a couple of different contractors that we have used in the past. They will come back to use with some hardware options that meet those needs, a price and some samples. Various members of the IT department will then put the sample hardware through its paces and we will take that information into consideration when making our final decision.

How are decisions made about networking for the district?

It is a very similar process to hardware decisions because really you are talking about the hardware that makes networks possible. Its a process that involves the relevant people in the district giving multiple perspectives on how to meet the needs that we have.

What are the most critical issues related to technology facing the district in the future?

Until recently I would have answered right away with access but with the One2World program finishing implementation next year that will no longer be as big an issue. Of course there will still be issues of internet access for students that do not have it at home but still it is a much more equal playing field now. I think the most critical issues will become how to leverage the vast amount of technology that students are bring with them to school on a daily basis but we have only scratched at how to integrate these into the classroom.

Following the interview we both refreshed our ever present need for coffee and began wandering around in the belly of the beast chating with various IT staffers and poking our heads into rooms while Todd explained the details. The vast majority of our servers (file, print, web, database, etc) are actually Virtual Machines running on four VMware ESXi hosts attached to fibre channel storage and managed by a VMware vSphere Center Server. The four hosts are HP Blade Servers contained in a C7000 blade enclosure with redundant fibre channel and network switches. These connect to an HP 4400 Enterprise Virtual Array storage system of 22 TB. We have 6 HP blade servers located in the same type of enclosure with attached SAS storage. There are a few Dell Poweredge and HP DL380 physical servers that are still running though likely will be virtualized during our next cycle. We utilize Microsoft Active Directory (2008 domain), primarily Windows 2008 servers with some 2003 print servers still functional. These servers run our Student Information System, web servers, database servers (primarily MS SQL), educational applications, etc. We also have some network appliances running Linux or BSD OS that are managed through web interfaces.

For security we deploy a Cisco ASA firewall to protect our outer edge from the internet. We utilize Netsweeper to filter our internet traffic and Symantec Endpoint AV to protect servers and staff computers. Our network switches, access points and controllers are primarily Cisco and are all managed by Cisco NCS Prime software. Wireless access is based on specific SSIDs per groups of users and access is controlled by 802.1x authentication using Microsoft Network Policy Server (Radius).

Our asset management system is incorporated into our online web-based work order ticket system (Schooldude).

As Todd and I ran through the TSI we both giggled a bit about some of their

assertions as to what was efficient but in all found that we were at all times at least satisfactory if not mostly highly efficient. We both found it strange that Sun was listed as the only alternative to mac and windows. Especially considering when this was last revised. But whatever.

In all it was a lovely experience that has shown me what a tightly integrated and efficient technology setup and department we have, that is focused on providing first rate access to teachers and students alike.