Superintendent's Report

November 25th, 2009

I have decided to do something a bit different this month with my superintendent's report. What is attached is a draft technology vision that really is more that just a technology vision. It is actually a learning vision for the district that is rapidly becoming our *organizational way of being*. I have seen how our teachers are beginning to think about learning in this new way that manifests itself in the learning environments they create for students.

Please know that this way of being has absolutely nothing to do with computers, software or networks, but rather is a shift of thinking about learning. So as you read the attached technology vision, please keep this in mind and do not get caught up in the idea that it is about equipment. The computers, software and networks, or more specifically defined as the information portal tools are simply there to increase the flow of information in, around and out from the learner so as to allow them to become part of the information age rather than just a bystander.

As always, please give me a call if you have any questions. Talk with you later.

Mark

La Center School District Technology Vision

Technology Vision Anchor

Our technology vision is anchored upon the concept we must provide learners with the tools needed to increase the Flow of Information around them (in-flow and out-flow of information) as they learn. This means to us that technology must provide increasing access to information in support of their learning, but also to provide the opportunity for learners to share back information into the broader network as well. In other words, the learner needs to become part of the network of information both as a user as well as a supplier to fully tap into their innate need/desire to learn. We believe this expansion of the in- and out-flow of information is central to the development of life-long learners who are prepared for a life of learning in the 21st century.

Background Perspective on Vision Anchor

Looking deeper at why this belief is so important we need to briefly look at how information has been used in the past to help students learn. Schools still today continue to create learning environments using a 19th century learning model (perfected during the 20th century) where information is provided to students by teachers either through their own explanations (gathered mainly through learning from static information provided to them as students) or via static sources of information they use within their classrooms (e.g. textbooks, books, articles, videos, etc.). Students are then asked to verify that the information provided to them has arrived in their memory safely through a variety of assessments that usually stop with the teacher to judge and assign a grade. This is the traditional form of learning that most all of us currently experience and expect, or have experienced over the course of our own learning journey. In most cases, it is all that we know or have ever known. Using the flow of information to understand this learning model, it is important to see the in-flow as static or fixed and focused on what others outside of the learner deem as relevant and important. The out-flow of information from the student is simply used as a measure for verification of in-flow information arrival and not typically as a measure of the connections with and/or ownership of the new knowledge created by the learner.

This static information in-flow and "parrot" the information back out model is not the world our students either live in today or will be expected to live and work in beyond their traditional educational experience when complete. One look at Google, Facebook, Twitter, Skype or Wikipedia will tell you the world has changed and in very significant and powerful ways. Without question our world is different, but how have schools changed to meet this new information topography? From our perspective the answer in most cases is very little. How then should it change? How do we get from here to there? What will it take for us to make this journey successfully? All we can offer as answers to these questions at this juncture is: We really don't know for certain. For those of us who are rooted in the 19th century learning model, that answer is very uncomfortable because we are well trained to depend upon someone else to know "the answer" and for them to tell us what to do to "fix the problem". If you are wrestling with this notion consider the following question: Is attempting to change our learning model using the learning model we are trying to change going to produce different results? In short, we believe that if there is a need to think differently then our strategy for change should begin by thinking differently.

So what does thinking differently really mean? Doesn't that mean we are going to just open up everything for the sake of opening things up? Well, maybe. But we need to begin our work by thinking about the destination we are heading for and what kind of thinking that learning environment will require of us. With this in mind, if we want students to be more than "biological file cabinets" simply receiving static in-flow information then we believe it is critical that students need to learn how to tap into the array of information available, make sense of it building upon their own knowledge base and then connecting it to new knowledge they create for themselves and others. In the information age (a.k.a. the 21st century), true power comes from not only being efficient and effective collectors and users of information, but also efficient and effective communicators of new information we create. This creation process requires students to use content to *learn to think* (i.e. analyze, evaluate and synthesize) rather than simply using content to *learn to know*.

One final thought in this area is important to note. Without new sources of information being injected into the network, the "information age" will only be built upon a fixed body of information. Put another way, ownership of information is not power but rather the ability to make sense of available information and adding to it with additional valuable information each of us creates is real power. We believe this is what 21st century learners will need to be able to know how to do in order to maximize their potential as a life-long learner.

Technology Plan – The 40,000 ft. View

With the ultimate aim to have available the tools to maximize the flow of information around students, we believe that our future is headed in the direction of a one-to-one computer (an information portal) to student ratio. This view is supported by many schools across the country that are moving in this direction as well as textbook publishers moving to online resources rather than print only content. Even though this is the direction we believe is the future, we also think that just giving students computers and access to information without fundamentally changing the way learning environments are created by teachers, understood by students and supported by parents is nothing more than an expensive way to deliver static content in a one-way flow of information. What we (as educators) need to do is to learn for ourselves how to see the world differently before we can create the types of learning environments students need for 21st century thinking. To do this, we need to phase in the technology as we learn how to tap into an expanded flow of information.

<u>Phase One – We Need To Learn</u>

We need to create one-to-one "like" learning environments within specific content areas such as social studies first at the high school and then at the middle school. One-to-one "like" means to us that the computers or information portals (i.e. netbooks) stay in the classroom rather than travel with the learner. In this configuration, teachers and students will have the opportunity to learn how to create learning environments built upon the increased access to information as well as the greater ability to create and share information within a digital environment. One might call this a pilot project, but we see it as a logical extension of our Lab Classroom Project concept but rather transforming it into a Digital Lab Classroom Project. Additionally, we need to create an opportunity to erode the barriers of traditional school in our efforts to learn how to develop digital learning environments. This could be done via a second digital lab classroom project

where we would create an Internet School built around students (many of whom are leaving our district for other digital learning or home schooling opportunities) who seek a differentiated learning pathway.

Together these two learning options – Digital Lab Classroom Project & Internet School – are essential learning opportunities not only for students, but for our parents, teachers and administrators. The system must change to support these new learning environments in effective ways if we fully expect to move the entire system to meet the board's Ends Policy expectations of developing life-long learners.

Phase Two – Scaling Up

This phase will be structured in a way that takes what we learn from phase one and bring it to all learning environments within the district. What this means exactly will depend upon what we learn in phase one, but know once again that we believe we are headed toward a one-to-one computer (i.e. information portal for each student) that expands the flow of information opportunity for each learner. This model could be one-to-one in all secondary grades and classroom based computers close to or at a one-to-one ratio within the elementary. What we learn in Phase one as well as how current content/textbook providers change in the years to come will certainly shape what scaling up within phase two means in the future.

Phase Three – The Paradigm Has Changed

At some future point in time given this current technological trajectory, we believe students will come to school with their own information portal as a general rule. Whether this is a computer or some other form of hand held device (e.g. super phone), we believe that most students will own and provide their own information access/sharing tools. Our technology work in terms of the flow of information will become similar to an internet service provider that is simply focused on providing the access point necessary to meet the demands for the in and out flow of information by learners. Additionally, our technology work will also provide support for students who are unable to provide their own tools either because they are too specialized (i.e. Computer Aided Design – CAD, Digital Graphics, etc.) or because they are not able to afford their own information portal tools.