Dcrewes_TPACK Assignment

Unit 5

CEP815

Part I

The learning –technology initiative that I would like to discuss is one that is being actively engaged at my current place of employment. In order to stay at the forefront of innovative instructional practices, our students and staff need to be able to utilize the applications of the Web 2.0 environment and its subsequent technology. There is a bond proposal being presented to the School Board, with its subsequent public vote soon after, that will allow the district's students 1 to 1 computing for every grade level, continuation and introduction of advanced technology for each building/classroom and the implementation of possible support staff to assist in the technology renovations and support for our school district. The problem at hand is how to support the staff in the implementation of the new technology and Web 2.0 emphasized curriculum.

The role of implementation has been accepted by our technology committee, of which, I am a member. There is a diverse staff on the District Technology Committee. We are lucky enough to have representation from all the district buildings, as well as many different departments. There are veteran teachers, newbies, Master teachers and many of the administrators. The general plan for the Committee is learning by design. With the help of the members, we plan on showing how the classroom can be different by illustrating the technology we have used in our own classroom and guiding our peers in the direction that they want to take their own classrooms in. They decide the end and we show them some possibilities utilizing the technology. Each staff member is then intricately involved in their own design.

Part II

In describing the TPACK involved with making this initiative a success in our school, we would have to discuss each department and their own individual design ideas. Since my expertise is Science, I will try to stick to the knowledge that I would try to bring to the initiative.

PK – The pedagogical practices I would utilize would be inquiry based. These would be problem solving based on the students own exploration and inquiry. Discovery learning, interactive demonstrations and inquiry labs all have proven to engage and entertain most of the students in my classes as I have tried to introduce aspects of the TPACK method into my own class.

CK – The content knowledge has been clearly defined by the state in the HSCE's (High School Content Expectations). Each subject has its own HSCE's, but more importantly, is that with the technology being introduced, some of those subjects will be easier to investigate and to explore. An example would be plate tectonics. The movements of the plates give rise to different regions of interactions with their own particular geologic events. A more basic definition of the content knowledge, without the "direction" of the state, is the content itself. One cannot teach if one does not know.

TK – Some of the technology I have used in class are web-quests, collaborative projects (Google Docs), Prezi, and embedded media. These are just a few of the many available to be used in the classroom. Before having the students try to master these programs, it is necessary for the instructor to be able to use them as well.

TPACK – Each category offers its own values and knowledge set to learning. If the content can be integrated from each of the three categories, the overall instruction will be far more meaningful to the student. Effective technology integration is the dynamic use of all the categories together in one learning activity.

TPACK integration can be difficult. Sometimes, all of the elements do not align themselves fully in a designed lesson. The true master teacher is one that can use all the elements of the TPACK method in everyday delivery.