## **Lesson Planning for Optimal Learning**

When planning a learning experience, I always start from the bottom up. After I have identified my TEKS, I summarize what specifically I want my student's to take away from the lesson and begin planning the end product/assessment. After planning my assessment, I begin thinking of ways to present the materiel and how this topic can be manipulated to fit my students' interests. Each year brings in new students with new interests; so readjusting each year's lessons to a class's individual interests are key to optimal student engagement.

In Project Based Leaning, summative assessments are often presented in the form of a final project. The final product should incorporate all TEKS in order to assess student mastery of the state content as well as national common core standards. National standards such as, "Research and evidence based" standards are easily met when delivering project based learning because the students themselves are in charge of using their resources and gathering knowledge to solve a problem.

Designing projects should also be build to introduce new technology for student discovery. Our PBI project utilized Power Point to design a logo, transforming a commonly known application into a new channel of function. Designing a workshop on how to design with Power Point helped combine the new with the old, simplifying the learning curve (from what it would be if a new application was introduced) but still leaving a moderate opportunity to explore unknown regions of the platform.

Giving the students the opportunity to create their own school shirt logo in our PBI lesson gave the students the power to incorporate their own interests into their work. When creating student activities, giving the students a choice to venture where their interests lie will help retain their excitement about the project and can positively translate into excitement about content material. Without student enthusiasm, learning will cease to exist; therefore, content mastery cannot be achieved.

Lesson planning should not only be written for the majority of the class, but individual accommodations and adjustments should be added in to meet all student needs. Providing students with one-on-one check-ins during group work can help assess where a student is on material mastery. Those students who need extra guidance can be placed in a smaller group so that they can be more easily monitored and be more confortable asking questions when needed.

With group projects, individual assessment is sometimes hard to evaluate so individuated checkpoints should be taken so a student does not get lost in the project. Presenting small exit tickets or visiting with each group can help assess what topics are being mastered and which ones need a little more help. Using this information, additional workshops can be added to re-explain or further clarify common misconceptions. Our lesson included a few Do-It-Yourself mini lessons that reviewed how to use protractors and how to solve algebraic equations so that those that needed the extra help could utilize them when needed.