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Using the Smart Board for Practice

Interactive White Boards (IWB) were originally developed to be used in a business setting. Since IWBs were introduced they have become a huge hit! IWBs were then marketed to schools and have since become used in classrooms throughout the world.

The SMART board is one specific type of IWB that is created by the SMART company. It is an IWB that is connected to a laptop and uses a projector to allow the students to see the computer on a much larger screen. The SMART board also has interactive qualities as students can use their fingers as a mouse to manipulate the computer screen. Research on the functionality and educational gains using the SMART board have begun to become more important in today's technology based society.

Since the SMART board has become so popular in the educational setting, we have to ask ourselves, is using the SMART board an effective way to practice educational skills and concepts? Omar S. Lopez from Round Rock, Texas completed a research study using 3rd and 5th grade ELL students in Texas who were continually falling behind in their state math and reading assessments when compared to the English speaking students.

During the 2005-2006 school year in Round Rock, Texas third grade ELL students showed a -21% achievement gap in mathematics and a -6% achievement gap in reading. Fifth grade ELL students showed a -19% achievement gap in mathematics and a -19% achievement gap in reading. As a school district their ELL students accounted for 7.4% of their population. This is the second highest rate of ELL students in the US. From an educational standpoint, these achievement gaps have to be something that is fixed as soon as possible!

During the 2006-2007 school year teachers in Round Rock, Texas were chosen to implement the use of IWBs to study the effect on ELL students as well as the regular students. After reviewing the states high stakes testing during the school year, it was found that the ELL students using the IWBs were able to close the achievement gap and in some places succeed at a higher rate than the regular students when compared to students that did not use the IWBs in their classrooms. In fifth grade reading, 100% of ELL students were able to succeed on their standardized testing compared to 83.6% of the regular students!

I also read a research article titled *Interactive whiteboards: boon or bandwagon?* (Smith, 2005) They looked at many of the pros and cons to using the IWBs from a teaching and learning standpoint. If we want to see gains like they saw in Texas throughout the world we need to be aware of the pros and cons to using the IWBs.

They began by looking at the use of IWBs from a teaching point of view. They discussed how flexible and versatile an IWB could be. You can place it at different heights depending on the age of the students you teach to allow for the best interactivity. Younger students can complete more computer activities without the need of fine motor skills to use a mouse. Teachers can also go back and forth between pages if they want to review skills. The IWB becomes a very versatile and efficient tool in teaching!

From a learner standpoint they began by looking at motivation. Students are more motivated to use the IWB, which leads to more retention of information and less behavior problems within the classroom. Images could be placed next to text to allow for more complex ideas to be understood by students. The IWB also helps to reach many different learning styles within the classroom.

These are two examples of research that shows IWBs can help students to succeed in school. IWBs can also allow students the opportunity to practice many different skills that are needed in school as well as in real world situations.

When reading a chapter on practice from *E-Learning and the Science of Instruction* there were many great points brought up that show how you can determine if you are using the IWBs with the greatest probability that your learners will practice and recall the skills they are being taught.

Within this chapter I found one quote from a study that really stood out to me as an educator: (Ericsson 2006) Practice is a necessary but not sufficient condition to reach high levels of competence. As an adult think back to when you were in school. How many things can you think of that you were taught, but since you have not practiced them or used them in a real world situation you don't remember them?

When we are designing our lessons for the IWBs (and even lessons in other situations) we have to make sure the practice is meaningful to ensure that the skill is transferred to the student. They need to use the skill or concept and continue to practice it to ensure that it stays in their long-term memory.

They also bring up the idea of using meaningful feedback. When creating e-learning lessons, websites, or webquests you will have questions that students will need to answer. If they are answered in an electronic form on a computer, the student should receive immediate meaningful feedback. For example: When a student answers a multiple choice question correctly there should be feedback that comes on the screen telling the student that their answer is correct and explaining that it is correct at the same time. This is also true for incorrect answers. The student should see feedback that appears telling them that the answer they chose is incorrect with some guided feedback to help them find the correct answer choice.

When reading the research that is associated with the use of the SMART board and then connecting it to the research on practice for learners, I believe that using IWBs in classrooms is a great way to help close achievement gaps at all levels throughout our country and world. As an educator, I currently have an IWB and I use it as often

as possible. I make it a center within my classroom and allow students to use it every day during our lessons. The interactive piece is exciting for the students and they all want a chance to use the technology. Today's society is centered on the use of constantly more and more developed technology. If we can get students using it early in school and finding ways to use it for learning they will have many opportunities to go far in life!