Incorporating the smart board with smart teaching education essay



Perhaps, technology has become more available to teachers in the last few years. Teachers need to be able to use technology to increase their professional development and to have positive contact with students on a regular basis. The action research report discussed in this article illustrates the positive effects of using a SMART Board interactive whiteboard in a fourth-grade classroom. Incorporating this interactive technology increased student contact time and decreased behavioral issues.

Richmond County School District requires teachers to integrate technology into classrooms on a regular basis. The Smart Board proved to be an exciting and fun bit of technology to integrate. It is an interactive whiteboard linked to a computer. Users write directly on the whiteboard and see their writing displayed on the computer's monitor. The whiteboard's easy touch screen intrigues students, converting their freehand scrawls into neat computer fonts. Their enthusiastic response to the board made me want one. However the whiteboard is an expensive tool, impossible to purchase with school funds. I applied for and received a district technology grant. Our SMART Board arrived and we eagerly set it up. Then it hit me. What am I going to do with this?

As an educator I constantly assess my teaching strategies. There are many benefits with the smart board. It has increased my contact time and student on-task behavior with the students.

My school services 310 students in five separate buildings. The fourth-grade class that participated in the study meets in an annex away from a regular computer lab. 55% of the class, and their parents, participated in this study.

There were 14 students (7 male and 7 female) with the following ethnic breakdown: 40% Caucasian, 42% Native American, and 18% Asian. The participants fall in the low- to middle-socioeconomic group, determined by the fact that 67% receive free or reduced lunch. Of all participants in the study, two are on individual education plans.

The first step was to communicate with the parents through a newsletter, informing them of my intent to incorporate technology into our lessons. I asked them and their students to complete a survey regarding technology use in the classroom. One question asked "when a class uses computers does the teacher spend more or less time with students?" I would ask the same question again at the end of the study. A second question asked whether students were more on task when lessons included technology.

To document technology use in the classroom, I began to keep a detailed journal. This began to take too much time, and I then began writing anecdotal notes in my lesson plans describing how we incorporated technology and the overall success level. This was more beneficial to my study. The class also participated in class meetings. During this time, students shared their opinions on technology-incorporated lessons. These results were documented in the teacher lesson plans as well. These three methods of data collections allowed for a subjective review of technology integration.

The SMART Board arrived in the winter. Although it was easy to set up, some problems required innovative solutions. Although we use both PC and Macintosh computers, I felt that the Macs would work best with my fourth

grade students because of the programs our school offers. Unfortunately the SMART Board's cords are meant for PC's. Mac users must order other cords. This, of course, meant an additional cost not accounted for in the original grant. However, my administrator, a great supporter of technology integration, found the funds to purchase the cords.

There was also the issue of too many wires. Ours is an older facility, and the outlets are not easily accessible. Having cords on the floor, even if secured with tape, presented safety hazards. Working together with my custodians and district electrician, we re-routed electrical cords/outlets so that they hung from the ceiling. This created a slightly better situation. Ideally, having wireless Internet and a ceiling-mounted projector would be safer and more convenient.

With the technical difficulties solved, the next task was to implement the SMART Board into the curriculum. What would be the best way to introduce this product? In what lessons would the whiteboard enhance instruction? These questions and my initial questions of increasing student contact time and the effects of the SMART Board on behavior led to the second part of my research.

Introducing the SMART Board brought much excitement – and some frustration. The students had never seen a piece of equipment like this, and at first it was distracting to their attention levels. This confirmed Daccord's (2004) point that incorporating computers can bring technical difficulties and interruptions. He also states that besides technology glitches, he was losing time at the start of class setting up the machines. It can also take more time

creating technology-based lessons. I found these challenges as well and was not able to jump right into my teaching.

To begin with, the class needed to develop guidelines. For safety, we agreed upon a walkway that students would use to avoid the cords and wires. I then showed some of the features of the SMART Board. Because the whiteboard was new to me as well, we chose to concentrate on the basics of the toolbox. The "newness" of the SMART Board quickly wore off and I was left to the task of implementing its use so deeper learning could take place.

I began with writing – a skill that many students need to develop, especially the editing component. I had discovered that students did not put a great deal of effort into this aspect of writing. Within our Language Arts block, I started using the SMART Board for editing. Using the "notebook" section of its tools, students worked together editing incorrect sentences and paragraphs. McQuin (2002) reports that the SMART Board is useful in demonstrating new procedures and makes saving lessons for absent students easy. In additiont, "The SMART Board enables teachers to emphasize and visualize important concepts" (par. 4). Using the electronic pens and keyboard, students began to eagerly share their editing processes. These same students also were completing seatwork in an efficient manner so they could participate more.

As the students' comfort level with the SMART Board increased, they began to use it in Math. Our district adopted a new series this year encouraging inquiry-based skills learning. After working independently or in small groups, students explained their thought processes by drawing or writing on the

interactive whiteboard. The students took immediate ownership of this act and began constructing their own learning. As Harvey and Goudvis (2003) state, " constructing meaning is the goal to comprehension... using the constructivist method to instruction, students can enhance their understanding, acquire and use their knowledge, and monitor their understanding." I wanted my students to be actively engaged in lessons and to construct their own meaning to the objectives. Using the SMART Board allowed students to do work on the interactive screen and retrieve it later. This encouraged them to examine their understanding on a regular basis, a task that was not possible when using traditional white boards.

Sally Bowman Alden (n. d.) discusses the use of technology to give students independence and a sense of accomplishment. Incorporating technology as a teaching tool may be one of the most effective ways to build both a child's self esteem and learning skills. This interactive tool was not only increasing student participation in class, it was also bringing a new sense of comradeship to the class. Students appeared to be more comfortable sharing their opinions on issues if they were able to display their answers through the SMART Board. Because students were more actively engaged in learning, I was finding more time to create highly motivating lessons as well as have more one-on-one time with my students.

We've used the SMART Board for 10 weeks. By reviewing my anecdotal notes, conferencing with students, and receiving parent input, I have found that incorporating technology on a regular basis improves instruction. My students say that classroom instruction is more organized and that they receive more attention from the instructor during technology integrated https://assignbuster.com/incorporating-the-smart-board-with-smart-teaching-education-essay/

lessons. The students have also said that they view using the SMART Board as a reward and tend to behave better during these instruction times. Parent surveys confirmed this as well. Parental testimonials include:

"(Student aaa) enjoys the time you are able to spend one-on-one when others are doing projects on the computer or SMART Board."

"(Student bbb) told me that when you use the "smart board" he tends to pay attention more and is able to stay on task more often."

"My child enjoys when the SMART Board is used because the teacher is able to hand over responsibility to the students."

The results of this study are very positive. Although there were some initial problems, such as classroom movement and setting up of the SMART Board, I found that the benefits of this integration definitely outweigh the drawbacks. Professionally, I come to class with a sense of purpose and can focus on specific objectives for teaching. My students appreciate the more personal contact time that incorporating technology into lessons provides. I also noticed an increase in on-task behavior from my students when I incorporate technology. Personally I think the SMART Board is motivating and fun.

I plan to continue using the SMART Board in my classroom. As both students and teacher become more comfortable with its features, we will place more responsibility on the learners in the class. In the future, students can use the interactive board to present projects and to demonstrate higher-order

thinking skills. The SMART Board has many unknown uses that I look forward to yet discovering.