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## **Technological Tots**

A Case Study

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This September, I had the most pleasant and enriching experience working at Meadowbrook Elementary School in Hillsdale, NJ. I was assigned to the Pre-K room not knowing exactly what to expect.

The birth of this article began on day two of school when I happened to notice whenever the teacher used any sort of technology in her teaching; the children would sit there-awestruck. Technology was integrated into my Kindergarten class only a few years prior with much success, and I wondered if the Pre-K would be any different. I have always been a major proponent of the infusion of technology into the class curriculum and have written various articles on the topic; but to see these four year olds be as attentive as tenth graders in the presence of technology, I just had to do a case study and share what I observed.

“What shape is this?” asked Eileen Thomas, one of the Pre-school teachers at Meadowbrook Elementary School (there are two.) During an interactive whiteboard lesson with her class; she taught the difference between a rectangle and a square. Thomas infuses technology into the class curriculum daily through the Internet and various educational softwares. It surprises me, how hard-wired these children are to anything technological.

Here are some questions I asked myself before I embarked on my observation: Can technology be integrated successfully into the pre-k class? What forms of technology can the students learn with? And will they retain what they learn? The answer was a big YES to all the questions that went swirling around my head. Computers are cognitive tools that are just waiting to be employed. We learn with the computer, not from the computer, and that is a fact that all educators, parents, and students must first understand.

As the schoolday begins each day, the students in Thomas’ class are greeted with technology as soon as they walk into the room. They put their backpacks in their cubbies and walk straight over to the interactive whiteboard where they wait patiently in line to “sign in” (trace their names.) This she uses as an attendance tracker, then a math lesson as the children count the amount of names are on the board of those that signed in and are in attendance for the day; as well as the proper formation of their name. I have been observing for a short while, and I can honestly say that ALL of the children are able to write their name legibly where two weeks ago, they couldn’t. They also know everybody’s name. Kudos to technology. These

children have been born into the digital world, during a bloodless revolution, a technological one.

I'm learning from my observations that technology infused into the daily lesson plan is both teacher- and student-friendly. For the students, they are asked a question from the teacher and they come up to the whiteboard during an interactive lesson and use the pen or marker to highlight the answer they think is correct; while the computer gives them a prompt telling them to click the pen to check their answer. What they are really doing has a two-pronged effect. They are honing their fine motor skills and coordination, as well as problem-solving. They are also using technology, which seems to come at ease and enhances their learning. For the teachers, technology is a great immediate assessment tool being able to "see" their students in several different lights. Thanks again to technology and a teacher that knows how to infuse it properly.

From teaching them days of the week to proper letter and number formation and sound, <http://www.starfall.com> has a myriad of places to visit and learn with. Thomas is able to tap into each of her students and not only connect material across the curriculum through the use of the computer; but is also able to teach more and have the children retain more information. As it all comes together, the student sees in their minds a concept map of each area studied. (<http://www.kidspiration.com>) They could not only answer questions for the lesson of the day, but extend their reach, and brainstorm more questions.

Thomas, like others has discovered successful teaching through computational integration but, unfortunately has had technology fail several times during a lesson. One of the biggest distracters of technology integration is when whatever technological device the teacher is using, an iPad, a whiteboard, a smartBoard, or a laptop fails to operate properly. These failures are inevitable and very frustrating. For this reason alone, many teachers avoid integrating technology in to his or her class. The major thing is to expect the failure, and always have a back up plan. A backup plan must always be available whether the teacher is using technology or not. The ability to adjust and adapt is one of the qualities of being a good teacher. This ability will be seen and mimicked by the students.

I have personally seen the children's reaction and willingness to want to learn when technology is employed. This is what they are comfortable with. This is what they know—this is what they have seen their entire lives.

"Computer integration in school is the future of education" is a comment often heard. Many people realize this, and many people agree with this statement. However, these same people may not realize that the future is now. It may be a minority that is growing into the majority who actually realize the importance of computers and their integration into the course curriculum. But it is those of us who see our students as living in a "virtual digital world," and are willing to work with that, will succeed!

Denise Averill-Casulli has been an educator for the past 18 years, who believes strongly about the integration of technology into the course curriculum. She has taught Kindergarten, Second and Third Grade. She has written several articles for T.H.E. Journal, and is now

freelancing for Demand Media and writes as one of their education experts. She holds a Masters in Education with a concentration in Educational Technology from Pennsylvania State University. Averill-Casulli resides with her two cats and husband in Emerson, New Jersey.