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**Modernizing Classrooms with Smart Boards**

The Smart Board is a large touch-screen monitor that is connected to a computer and allows for an interactive and immersive classroom experience. The projecting of videos, the highlighting/circling of words, and the writing of notes on the monitor are just a few of its capabilities. The Smart Board was at the center of attention when it was introduced in 2004, where critics and proponents debated the negative and positive effects of this new piece of classroom technology. Although many will argue that any form of technology can detract from the typical classroom experience (e.g. holding physical books, highlighting and annotating on paper, learning how to think independently), there is plenty of evidence from various articles and studies to prove otherwise. Because the Smart Board facilitates student creativity, accommodates all reading styles, and encourages collaboration among classmates, it is truly a piece of technology that is positively enhancing and redefining what reading means in the digital age.

The Smart Board is changing how students read in the classroom by making it more of a creative process. When reading from a physical book, creative thought processes are often removed due to the constraints of the medium itself. This is mainly because of the brain’s innate ability to form “physical landscapes” in the reader’s mind. In a *Scientific American* article written by Ferris Jabr, it is explained how meaning in physical books is “anchored to structure” and that “when we read, we construct a mental representation of the text.” This makes reading a methodical process in which readers understand text based on its structure and where specific ideas are physically located rather than comprehending them in a meaningful way. A study conducted by Dartmouth College reinforces how differently readers conceptualizing and comprehending information when it is presented on paper than on a digital screen. In the study, 300 adults were placed into groups and asked to analyze various sets of information ranging from articles on cars (more factual pieces of literature) to short stories (more philosophical pieces of literature). They read this information from computer screens and from paper with print. The results showed that abstract thinking was impacted by digital reading but concrete memory was not (Lazar, 2016). In short, this underscores the notion that even though reading from physical books allows readers to “memorize” certain facts because of cognitive reasoning, digital reading technology improves comprehension not only on facts, but also on the world around them; digital reading makes students more abstract and creative thinkers.

Opponents of this claim might argue that there are fallacies in how this study was presented simply because different people have different ways in which they retain and comprehend information. Some people are just naturally abstract and creative thinkers, regardless of what platform they use to read information. An article published by *Healthline* titled “Left Brain vs. Right Brain: What Does This Mean for Me?” states that this can be proven by looking at the two hemispheres of the human brain: the left side is more adept at linear thinking and the right side is more adept at creative thinking. In other words, some people have a more dominant “right brain” than others. However, emphasis should be made on the importance of digesting information from multiple media forms depending on what the person is reading. Physical books should be used when one is trying to memorize information, and digital technology should be used when one is trying to think holistically and intuitively.

The days of the “one-size-fits-all” educational model are long gone as technologies like the Smart Board are conveniently accommodating the different learning styles of students. Akin to the previous explanation on how some students are more creative thinkers than others, there are various ways in which students process and learn information. In a *TED Talk* presentation titled “Blending Technology and Classroom Learning,” speaker Jessie Woolley-Wilson highlights the importance of placing Smart Boards in classrooms because of their ability to adapt to the learning needs of every student. She states “I am very, very excited about the future of learning, despite what you might read in the paper every day, because I think it rests in the promise of blended learning. Blended learning, learning that combines the traditional face-to-face classroom experience that all of us perhaps grew up with, with new innovative learning technologies that have the power, in my mind, to democratize learning.” One possible counterargument to this claim is that the Smart Board does not encompass all reading styles as it greatly favors visual learners. Because the Smart Board offers a completely digitized learning experience, there are limited opportunities for tactile learners to engage with the text. After all, holding, touching, and turning pages does not exist with the Smart Board. However, the tangibility of holding, touching, and interacting with the Smart Board does exist as students can hold the pen to underline text, and interact with the screen because of its touch screen technology. The Smart Board can become as physical as a student wants because of its flexibility to cater to his/her reading and learning needs.

What is more revolutionary about the Smart Board is that it has the ability blend learning styles together. For instance, visual learners can view and learn from visual elements like underlined, highlighted, and annotated text, while tactile learns touch and interact with the touch screen board by aiding the annotated text. Audio learners can listen and have discussions about the text with other classmates, while aural learners can play digital books with sounds, voiceovers, music to aid in their understanding of the text (some prefer interpersonal communication while others prefer being spoken to). In any case, a prime advantage of the Smart Board is that it can personalize texts so that different reading styles are met, which directly correlates to student engagement. In her research paper titled “The Impact of a SMART Board on the Literacy Teaching and Learning in an Inclusion Third Grade Classroom,” Stephanie Anne Ferris notes that (based on a series of observations conducted in 3rd grade classrooms), if students acknowledge that their preferred learning style is being met, they will more eagerly partake in class discussions. Interacting with the Smart Board excites students because they understand its ability and versatility to transform into reading text the way they prefer. She states that “teacher participants found that all students wanted a tum at the board. Students shared new understanding they were making and showed a high level of engagement, asking the teacher to use the board to help explain a concept when it wasn’t currently being used with their preferred learning style.” In other words, students were not afraid to engage with the text because if an aural learner wanted sound to be played, for example, he/she could easily have the Smart Board do that. The Smart Board can easily be manipulated to meet the student’s specific reading and learning needs.

A central aspect of the Smart Board is that it encourages collaboration among classmates. According to a recent study conducted by CompTIA, which surveyed 500 K-12 and college instructors across the country, it was revealed that “78 percent of K-12 teachers and administrators believe technology has positively impacted the classroom and the productivity of students.” The report goes on to explain that this productivity stemmed from the mutual engagement between the Smart Board and the collaboration among the students. In this respect, the Smart Board differs from other digital reading technologies like the Kindle and iPad because these mediums are very individualistic. Just like the physical book, these devices make it easy for students to keep their ideas to themselves because they are not easily shared with others, unlike the Smart Board which is a giant screen mounted to the wall where class discussions can be centered around. Reading is both a private and interpersonal experience where independently grappling one’s own ideas and assimilating another classmate’s ideas are important. However, personal devices can easily trap the reader into his/her own sphere, prohibiting opportunities for collaborative engagement. Malcolm Gladwell’s book titled *Outliers* explains the importance of collaboration. He explains the main reason why plane crashes occur is because there is a lack of teamwork and communication between the pilot and co-pilot. On page 52, Gladwell states that “it’s not that the pilot has to negotiate some critical technical maneuver and fails. The kinds of errors that cause plane crashes are invariably errors of teamwork and communication. One pilot knows something important and somehow doesn’t tell the other pilot. One pilot does something wrong, and the other pilot doesn’t catch the error.” The same idea can be seen in the classroom, where silently contemplating one’s own ideas without considering other thoughts or perspectives is detrimental to the productivity of the class. The Smart Board can help improve the lack of teamwork, communication, and spreading of ideas by acting as a centerpiece where students can come to read the text together, and in the process, discover or argue with new ideas that are proposed. In a sense, the Smart Board forces students to engage with one another because there is only one screen, and thus, one main discussion.

One unique aspect of the Smart Board is that it is connected to a computer, and thus the Internet. This immediate Internet access offers readers a plethora of online resources at their fingertips. An example of this would be searching the dictionary definition of a word a student is unfamiliar with. In addition, the Smart Board allows many different types of media, including photos, videos, graphs, and maps, to be displayed (“The Advantages of SMART Boards in the Classroom,” 2014). These medium enrich and expand the learning experience by promoting interest and entertainment among the students. Staring at printed sheets of paper without any other type of medium to amplify the appeal of the text is mentally taxing and can cause readers to stop paying attention. It is also possible to integrate various technologies, such as software applications, cameras, video cameras, and microphones, to improve the digital experience (Bradley, n/a). Changing the way students read by making it more interesting and enjoyable will increase engagement and overall collaboration.

In this day and age, there is no doubt that technology is perpetually shaping our lives. Specifically, technology is rapidly making a dominating presence in classrooms, where students have the capability to read, highlight, and underline text in a creative, intuitive, and collaborative manner. Even though laptops and iPads are also popular forms of technology found in classrooms that can be used to read and analyze text, the Smart Board is unparalleled in its ability to bring students together around a central platform. Because the Smart Board facilitates student creativity, accommodates all reading styles, and encourages collaboration among classmates, various articles and studies can support that this piece of technology is redefining the conventional ways of approaching literature in classrooms.

Christina,

Overall your essay is well structured and clearly argued. In my comments I’ve tried to push you to clarify the terms of your engagement a bit, keeping in mind a skeptical reader at each step along the way. In particular, you need to do a bit more work establishing the smart board as a technology of reading, specifically, and clarifying specifically how some of the studies you cite bolster your argument about the kinds of engagements smart boards encourage. If you have any questions about my comments, come see me and we can discuss them.

--Ryan Cordell

**Works Cited**

Bradley, Katherine. “The Advantages of Having a Smart Board in a High School Classroom.” *Our Everyday Life*, Our Everyday Life, oureverydaylife.com/advantages-having-smart-board-high-school-classroom-11981.html. Accessed 20 Sept. 2017.

Gladwell, Malcolm. *Outliers: The Story of Success*. New York, Back Bay Books, 2008. 52. Print.

Jabr, Ferris. “The Reading Brain in the Digital Age: The Science of Paper versus Screens.” *Scientific American*, Scientific American, 11 Apr. 2013, www.scientificamerican.com/article/reading-paper-screens/. Accessed 20 Sept. 2017.

Lazar, Michael. “Study Finds Difference In Recollection From Screen Reading Vs. Paper Reading.” *The Huffington Post*, TheHuffingtonPost.com, 30 May 2016, www.huffingtonpost.com/michael-lazar/study-finds-difference-in\_b\_10210036.html. Accessed 20 Sept. 2017.

Pietrangelo, Ann. “Left Brain vs. Right Brain: What Does This Mean for Me?” *Healthline*, Healthline Media, 18 Jan. 2017, www.healthline.com/health/left-brain-vs-right-brain#overview1. Accessed 20 Sept. 2017.

Ferris, Stephanie Anne. “The Impact of a SMART Board on the Literacy Teaching and Learning in an Inclusion Third Grade Classroom.” *Education and Human Development Master's Theses*, The College at Brockport: State University of New York, 1 Sept. 2010, digitalcommons.brockport.edu/cgi/viewcontent.cgi?article=1026&context=ehd\_theses.

“Technology Helps Boost Student Performance.” *Press Releases*, CompTIA Information Technology, 28 June 2011, www.comptia.org/about-us/newsroom/press-releases/11-06-28/making\_the\_grade\_technology\_helps\_boosts\_student\_performance\_staff\_productivity\_in\_nation%E2%80%99s\_schools\_new\_comptia\_study\_finds.aspx. Accessed 20 Sept. 2017.

“The Advantages of SMART Boards in the Classroom.” *Governor Business Solutions*, Governor Business Solutions, 25 Apr. 2014, www.governorsolutions.com/the-advantages-of-smart-boards-in-the-classroom/. Accessed 20 Sept. 2017.

*YouTube*, YouTube, 17 Dec. 2012, www.youtube.com/watch?v=o0TbaHimigw. Accessed 20 Sept. 2017.