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The Impact of Technology on Teaching

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Teaching strategies have historically been impacted by technological advancements. There was a point in time where classroom instruction was conducted without the use of Microsoft PowerPoint, but instead on a white board with dry erase markers. However, once a computer was connected to a projector and teachers integrated outlines, real-life images and animations within the computer software PowerPoint, the demand was placed on teachers to learn the latest technology and integrate it into teaching practices. It is generally believed that students become more engaged and excited about learning when technology is involved. Within the past five years, the world of education has yet again been impacted by technological advancements through the introduction of digital tablets, such as the Apple iPad and Samsung Galaxy tablet. As technology continues to develop and launch new technologies, the field of education has to make continual decisions on when, and how to introduce the technologies to classroom learning.

The advancement from desktop and laptop computers to digital tablets has significantly increased the portability and privacy of use of digital resources such as the Internet within the classroom or therapeutic settings, especially on the fly. This accessibility to quick digital resources allows educators and therapists the opportunity to bridge the gap for students who may have limited experiences to activities compared to most children, such as going to the zoo [1]. For a child who is unfamiliar with the concept of a giraffe, a teacher can quickly grab a digital notebook, access the Internet and play the child a movie clip of a giraffe. This individual exposure to information allows teachers and therapists the opportunity to expand upon specific information that will directly impact an individual child's learning and retention of information being taught. However, the teacher must be knowledgeable about the specific contextual information that will be shared with each child using the digital tablet prior to exposing the child to the information. Teachers no longer have to rely solely on the Internet as the source of information. The emergence of digital tablets did not just impact the accessibility of the Internet to students, but also many other programs that became available via electronic download as an "app" at relatively low costs. The programs available for digital notebooks have a wide range of target audience from preschool children up to adults. The number of available programs changes on a daily basis.

Teachers have been utilizing available Internet resources and apps on digital tablets in order to reduce negative educational factors such as socioeconomic status or presence of a disability of students. The use of a variety of applications to enhance teaching opportunities offers students from varying backgrounds more equal opportunities for learning and retention. Students demonstrate a high level of interest and a greater willingness to seek more information with hands-on teaching opportunities with digital tablets [2,3]. Providing students with a means of accessing information that they might not otherwise have access to, in a manner that allows privacy is an invaluable teaching tool. For example, for students who have reading difficulties and may not have good reading fluency to internalize the pronunciation or meaning of an unfamiliar word, they are able to access tools like www.visualthesaurus.com on a digital tablet while reading for a recording without their peers' knowledge. The number of available resources that can be utilized to equalize educational opportunities for students continues to grow.

Having so many teaching tools at one's fingertips is convenient, but keeping up with what is available can be quite time consuming. Digital tablets have provided a unique teaching tool to teachers and therapists alike through the availability of apps that serve a wide variety of purposes, visual attention, reading, writing, problem solving, and so many others [4]. However, it can be quite difficult for teachers and therapists to have knowledge about the most current apps that are available, or based upon best teaching practices. The availability of apps associated with teaching methodology are now readily available to the public, which is shifting requests made by parents of children with special needs on teaching strategies utilized with their children. This shift places teachers and therapists in a difficult position, as they are excited to have parent input, but not knowing the origin of development, or research strength behind a given app may make them hesitant to agree to implement the parents' request without further exploration. Therefore, the implementation of digital tablets into teaching instruction must be integrated in a purposeful manner with evidence to support its effectiveness or in the least strong support that the applications being utilized bridge a gap that could not otherwise occur.

Advancements in technology are exciting and can frequently offer opportunities that did not previously exist. This is especially the case in the realm of educational settings and students with limited learning opportunities or learning disabilities of varying degrees. The presence of digital tablets has already impacted how many children, and adults, read books. Instead of going to the local library or bookstore, people are visiting online bookstores and downloading the most recent best seller or prize winning book to their tablet to be read. Educators have the opportunity to integrate these technological advancements as they see fit and as are proven as effective practice in classroom learning. On one hand, children from varying backgrounds have the opportunity to have exposure to a variety of environments and experiences through handheld technologies such as digital tablets to help bridge educational gaps that may exist [5]. On the other hand, a high demand is placed upon educators to stay informed of applications that become available for the latest technologies for educational purposes, which in itself could be a full-time job. As technology continues to expand and launch new products, the field of education changes. It is important that the concept of high quality education practice remains at the forefront of

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teaching from the perspective of teachers regardless of what apps or gadgets may be requested.

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