

Technology Leadership Reflection Paper

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Technology. The Merriam-Webster dictionary says that it is the practical application of knowledge. It's a big word with many implications. Some people feel it is a revolution, others a curse. Regardless, technology is here to stay and it is making a real difference in the way we work, learn, and play. Specifically, technology has changed our learning environment.

The introduction of the Internet, then called the ARPA (Advanced Research Projects Agency), in 1969 was for the United States Department of Defense use only. It included a network that was built to help universities and researchers collaborate on projects and conduct research. Now, the Internet includes a vast collection of linked, multimedia pages that can be viewed by virtually anyone. With the advancement of the Internet also came Web 2.0. This is a platform that allows users to interact and manipulate data using different tools or applications. For instance, wikis, photo sharing, blogging, social networking, and rss feeds are all examples of Web 2.0 tools. These tools allow the user to create and change information in print, audio, or video format. Sometimes called the Read/Write Web, these tools offer users ways to personalize their online existence and develop their own critical identities (Hall, 2009). What does this mean for education? Well, it means that the learning environment is now expanded and no longer limited to the physical location of the school. Teachers and students have access to updated documents, artifacts, and books that were previously unavailable to schools because of budget or physical restrictions. In addition, resources are now dynamic. Learners can interact with experts, collaborate with other learners, and publish their work on the Web. Finally, the students learning environment is no longer restricted to a time or place. They are able to access multiple tools in many locations at any time of the day or night.

So how does this change the role of the teacher, and in particular, the technology leader within the educational environment? Let's first look at the qualities of a good leader. According to Goleman, Boyatzis, and McKee (2002), they can be a visionary, coach, affiliative, democratic, a pacesetter, or commanding. Of course, many great leaders include more than one of these qualities. Teachers often possess three in particular: visionary, affiliative, and democratic. A visionary leader inspires people, listens to the values of others, and focuses on long-term goals. All important characteristics when working with educators of varying comfort levels with technology and theories of education. An affiliative leader is one who is people-focused and accommodating. These are also valuable characteristics in the educational environment. This type of leader would make sure that staff members are trained and confident in their abilities before expecting them to use new technology inappropriately. Finally, a democratic leader is open to change, fresh ideas, and collaboration. This is essential if a learning team is expected to accept, utilize, and ultimately promote technology in the learning environment. The roles of a great technology leader are many. They should be expected to form and lead a technology team, help build a plan that strategizes and facilitates technology use, help create and sustain a culture of tech integration, and finally, monitor and evaluate changes necessary in the integration of technology. These are daunting tasks when considering the many aspects and changes occurring in technology and education.

There are some real concerns that any technology leader should consider when addressing the learning environment. One critical issue is the digital divide and its impact. A technology leader needs to ensure that the technology needs and opportunities of all students, regardless of socio-economic status, race, ethnicity, or regular/special needs students are being met. As a means of meeting these needs, several ideas and strategies come to mind. All students

attend and participate in computer class, at their ability level with adaptations and accommodations. This may mean providing earphones, touch screens, ability programming, or voice-controlled software. In addition, multilingual websites need to be encouraged for English language learners. Another consideration may be to open the technology lab with supervised public usage to the community. Finally, family fun nights in the lab would ensure that all families have the opportunity to experience and explore technology. Another critical issue is debate over distance/virtual learning and the traditional educational setting. A strong technology leader sees the value in each and responds accordingly. When considering the learning environment for a K-12 student some important details need to be addressed: learning style, individualized curriculum, and family needs (Pohl, 2009). Many fear the loss of a controlled environment may be detrimental to a child's education. Yet for some students, a virtual program or in combination with the traditional setting may in fact be the perfect fit for that student. Research shows that learners at lower ability levels benefit from technology assisted programs with an increase in motivation and very specific accommodations for learning. It also indicates that high functioning students benefit from the ability to progress at a faster pace than the classroom setting, for example, taking online college courses during the scheduled high school day. In addition, many combinations of virtual learning, combined with collaboration in the traditional setting have been shown to highly benefit student achievement. A final critical issue facing the technology leader and schools today is safety, security, and privacy. Tech leaders need to ensure that these are addressed through an Acceptable Use Policy that is clear and enforced, comprehensive staff and student training, and continuous involvement with state and federal policies. The tech leader, along with the technology team, also need to continually review and

change procedures that deal with cell phone usage, social networking, as well as other technologies.

Technology. “No we don’t know where it will lead. We just know there’s something much bigger than any of us here,” Steve Jobs.

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