

Things Must Change or They Will Always Stay the Same!

Thomas S. Kuhn wrote several books and articles explaining, among other things, his theory on paradigms. A paradigm is an ideal or model that is considered to be the standard by which we all accept its truth. For example, in early times, Europeans were told that the Earth was flat. They accepted this 'fact', and as a result, they were afraid to venture too far from home for fear that they might 'fall off the edge' and never be seen again. This paradigm held true until Christopher Columbus presented a new paradigm that proposed that the world was round and he would prove it by sailing around the world. It took some proving on his part, but soon a shift in paradigms occurred and now we accept that the world is round, even though many of us have never ventured more than 1000 miles away from our homes.

Paradigms exist in many forms around us, even in education. At my school, the educational technology paradigm existed that the only reason we have computers in our rooms is because our former principal was a "techno-geek" and he wanted us all to communicate through his mode of choice ... email. Therefore, many of our teachers see technology in our classrooms as a means of communication only. They resented having this advancement forced upon them when they could just as easily visit his office to speak to him personally, or he could write a note and put it in their mailbox. What they did not understand is that the age of technology at our school just happened to coincide with his hiring. The computers were being brought in to begin preparing our students for the new educational expectations of the 21st century. Technology's

usefulness in education has a vast variety of applications, but the first thing all teachers were made to do on the new classroom computers was to set up an email account and begin using it immediately. Thus the Mandeville High School paradigm was conceived: “Computers were installed to receive emails from the principal and then you must learn to use them in order to email him back.”

The negative aspects of this paradigm are obvious. We have teachers who have resented using computers as much as they resented our former principal. They felt that *he* was the one who saw a need for technology in the school and they viewed it as an unnecessary requirement of their time to learn how to use them. Because they were not in-serviced prior to the arrival of the computers, they assumed that email was their only function and they formed a negative opinion before they ever touched the keyboard. When in-service opportunities did become available, they were already of the mind-set that the functions of the computer were strictly for inter-office communications for people who liked being “techies”, and they wanted no part of them.

The positive aspect of this paradigm is that while many of the older teachers were set in their ways and did not want to learn to use the computer, they felt they were being forced to do so by their ‘boss’, and thus they quickly learned to manipulate the machine to perform basic functions. While this may not have provided students with instant educational benefits, it did make all teachers ‘get their feet wet’ by turning the computer on daily and learning that they would not destroy it with a single keystroke. Eventually curriculum in-services began to show teachers how to incorporate the technology into the classroom for the benefit of the students, and since then, our school has had a major shift in paradigms. Our new paradigm is now: “If you don’t use

technology in the classroom daily, our students will be left behind when it comes to preparing them for the future.” While this paradigm also has its pros and cons, at least we are moving in the positive direction with our shifts.

A shift needs to occur in our school in order to enhance student learning. This shift needs to move along the lines of, “There is a time and a place where using technology benefits the students and has a greater impact on their retention and application abilities verses learning through traditional teaching methods.” If we train teachers to use the technology for its ‘usefulness’ and not ‘to just be using it’, then teachers will begin to see it as a tool rather than a requirement forced upon them by the powers that be. An example of this shift could be in our science labs. Buying pigs for dissection can be very costly and quite upsetting for some students. An alternative to this could be the use of ‘virtual dissecting lessons’ that have been made available through the Internet. Not only do these save money and reduce some student’s apprehension to dissecting, but they can also provide the students with endless opportunities to practice dissections that may be difficult or time-consuming. Once teachers see the value and the versatility that technology can provide, then they will be able to disseminate between when to use it and when not to force its use.