Just for the ASKing! is a monthly e-newsletter that addresses the needs of all those who strive to be instructional leaders. This month’s issue is the first in a periodic series focused on the role and use of technology as a teaching and learning tool. It identifies a set of “givens” that provide a strong foundation for making wise decisions about technology acquisition, professional development, and integration into the instructional program.

Navigating the Digital World

By the time I finish writing this issue of Just for the ASKing!, new products that claim to be THE technological innovation that will be the answer to all of education’s problems and guarantee to improve student achievement results will have been imagined, designed, and marketed. Ads will appear in periodicals and online tempting schools and districts to spend their limited funds on this latest cutting-edge breakthrough. In truth, there is no single approach, technique, or piece of technology that will work in all cases for all students. Consequently, we have to learn to make careful choices remembering that there is no clear definitive research that unequivocally concludes that the use of technology improves student learning. On the other hand, its proliferation in the world beyond the school walls provides a strong argument for why technology should take its proper place in our classrooms.

As we wrestle with how to proceed with technological applications in our schools, there are some “givens” that can help us navigate the digital world and make judicious choices. This is the first in a periodic series of issues addressing the use of technology as an instructional tool; we begin by exploring some of the “givens” that help us move along the high-tech highway.

Given that...

We will never go back in time to the “golden days of yesteryear,” logic tells us that we should be doing our best to keep up with the ever-changing world and thus keep abreast of technological changes that are impacting our lives and the lives of our students. For those of us who have grown up with technology (digital natives), keeping up is a much more fluid process. For others who have had to adjust to the technological innovations (digital immigrants), learning to use and apply technology in the classroom is often more difficult. Regardless of where we might fall in the technological spectrum, we cannot remain static in our thinking. Each of us must resist the temptation to mumble, “This too shall pass,” because it won’t!
Given that…
There is no technology that can address or solve all of education’s problems, we must develop a method for making the most enlightened and astute decisions possible about our technological choices and how they should be integrated into instruction. A logical approach schools and school leaders can take is to “begin with the end in mind” by asking serious questions to facilitate the decision-making process. The questions below can serve as guidelines to determine what technology to select:

- What technological applications will help our students master the skills and knowledge required by the Common Core State Standards or other state and district standards?
- What assessment criteria and tools will we use to determine if our technology use has led to greater student academic success?
- What specific uses of technology during instruction do we believe will facilitate successful and sustained student learning?
- How will we use the data gathered during the use of selected technology to make adjustments in our instructional delivery so we can work more efficiently and make decisions about future technology acquisitions?

With this process in mind, leaders can form a vision based on projected goals that will support technology purchases. The vision should be established, not on what is the most current or “sexiest” new product, but by putting the collective heads of the most knowledgeable personnel in the district or individual school together and continually asking, “How will the purchase and application of this technology advance student learning?” Let wisdom, not emotion, prevail.

Given that…
There is a wide range of attitudes, skills, and knowledge in any work location related to the use of technology, it is paramount that schools establish an ongoing system of professional development based on both full staff and individual needs. One non-negotiable that should guide all technology decisions is that all staff members must participate and set personal goals for advancing their technological knowledge and skills. Digital paralysis and mediocrity should not be accepted.

Given that…
Many schools or districts have technology specialists, it is critical that these individuals address the needs of all personnel. Whereas some educators can proceed with ease and confidence, others may require more individual attention. One approach that has been successful with teachers who require more attention is to have the technology specialist work side-by-side in the classroom with the teacher as the technological application is being used. This approach has improved the confidence and advanced the skills of teachers who are apprehensive about using technology with their students.

Given that…
There are widely recognized and worldwide adopted technology standards for leading, teaching, and learning in the digital age as established by International Society for Technology in Education (ISTE), educators can adopt local standards of excellence and best practices by employing the National Educational Technology Standards (NETS) as guidelines. As denoted on the NETS-S website, “Effective teachers model and apply the NETS standards as they design, implement, and assess learning experiences to engage students and improve learning.” The five standards along with specific performance indicators established for teachers are as follows:

- Facilitate and inspire student learning and curiosity
- Design and develop digital-age learning experiences and assessments
- Model digital-age work and learning
- Promote and model digital citizenship and responsibility
- Engage in professional growth and leadership
In addition to communicating technology standards for teachers, the website includes clearly delineated standards for students, administrators, coaches, and computer science educators. For specific information, go to www.iste.org/standards.

**Given that…**
Technology hardware and software is expensive, equipment should never sit dormant or gather dust from lack of use. Once purchased and adequate staff training conducted, leaders must assure that technology use is integrated into every classroom. Additionally, leaders should model technology use at meetings, share honest stories of their technology journey, and be a constant cheerleader for the staff as landmarks are achieved. A spirit of celebration and accomplishment should permeate the school.

**Given that…**
There are very few jobs, if any, that do not require technology skills, it is important that educators make technology use a natural part of the learning process in schools. Just like adults, many students build their personal confidence level when they have the opportunity to make use of technology beyond video games, sending text messages, and checking out social network sites. By having students interact in more creative ways to learn, problem solve, and make real-world applications while they are in school, it will make the adjustment to the world beyond school less jarring as students work with technology in post-secondary education or in the world of work.

**Given that…**
Students learn at different rates and in different ways, technology resources can allow students to work and learn at their own pace. Technology likewise can allow teachers to meet individual student needs by providing appropriate interventions for selected students and extension opportunities for students who need additional challenges.

**Given that…**
The technological playing field is not level from school to school or from student to student, it is imperative that educators seek opportunities to provide equal access to technology in schools. While some students have consistent access to the Internet as well as the most current products outside of school, other students not only do not have technological resources beyond the classroom but their economic standing restricts them from learning about or interacting regularly with the most up-to-date products. When students complete their K-12 education by either going to college or choosing an occupation, the level of inequality continues with a huge disparity in technological experiences that were not provided in their schools. Supports are available to schools through grants, government funding, and creative thinking that will enable schools to put updated technology into students’ hands and thus promote skills they will need beyond their K-12 experiences. Consult the following websites for more information about funding for technology:
- [www.engaging-technologies.com/education-technology-grants.html](http://www.engaging-technologies.com/education-technology-grants.html)
- [www.scholastic.com/browse/article.jsp?id=3750588](http://www.scholastic.com/browse/article.jsp?id=3750588)

**Given that…**
Parents play a vital part in the educational equation, it is important to acknowledge their thinking and expertise related to the use of technology in schools. The Consumer Electronics Association (CEA) lists the use of technology in education as one of the “five technology trends to watch” for 2013. Their conclusion is based on an increase in public and parent support for the use of technologies that offer students more personal and interactive opportunities to learn. The CEA research has determined that 75% of parents in K-12 schools either agree or strongly agree that technology significantly enhances student learning while two-thirds of parents acknowledge that they have seen first hand how their children benefit from the use of
technology in schools. In some locations, parents have been called upon to work closely with schools to provide input into the direction the school will take.

In conclusion, as Robert Slavin, Director of the Center for Research and Reform in Education writes, “The future of instruction may be in exciting new technologies, but those technologies alone will not transform the classroom. We will always need an equal focus on new tools AND effective human methods paired with effective professional growth.” Denying the importance of including technology as an instructional tool by waiting for research that conclusively makes a link between its use and student learning is almost like saying that even though food is a viable and important part of our lives, we do not need to provide a lunch period for students during the school day. When analyzing the importance of using technology as a learning tool, it is not a might but a must.