



Administrators Accessing the Effectiveness of Technology

URL: <http://www.schoolcio.com/ShowArticle.aspx>

By Steven Moskowitz and Sarah Martabano

Today district and building level administrators are busier than ever. As districts continue to invest in new more advanced technologies, school building administrators are being charged with the added responsibility of overseeing and managing their local technology program and few are prepared to do so.

It is not uncommon to be asked questions about their school's technology use by community members, employment candidates, or board members. Here is a sample of what we've heard:

- What technology is being used?
- How do we know that the investment is worth it?
- How is it being used in the classrooms?
- How does technology change teaching and learning?
- Is it making a difference on student achievement?
- How do you evaluate the effectiveness of technology?
- What is Web 2.0 anyway?
- Is my student safe on the Internet when at school?
- What can I do at home to help my child use technology?

It is important that today's administrators are prepared to answer these questions. Here is a list of things that will help you get started:

1. Have an awareness of instructional technology tools and trends.
2. Establish metrics for assessing technology integration.
3. Build your own proficiency with appropriate technologies for your work.
4. Gain an awareness of the impact of data driven decision-making.
5. Develop an understanding of the relationship between hardware acquisition and staff development.
6. Learn about the unique facets surrounding financing technology including the importance of equipment replacement cycles.
7. Create the best practices of common technology frameworks to empower teachers and schools at the building level.

Technology has also become a larger part of school budgets and programs. According to a new report from Compass Intelligence, an IT consultant market research firm, IT spending in education will reach \$47.7 billion by the end of this year and is expected to top \$56 billion by 2012. While most districts employ technology coordinators to manage their technology program, the role of the coordinator has expanded with

several new areas of responsibility.

They include:

- Data reporting for NCLB local and state requirements.
- Safety and security surveillance, emergency notification systems for staff, students and community, and electronic identification for staff and students.
- Public presence on the Internet via website creation, audio and video production and support.
- Telephone systems and directories.
- Student information systems, grade books, assessments, special education databases, and college preparation websites.
- Increased involvement in public relations and the need for immediate access to information.

Due to these expanded areas of responsibilities local school building administrators are taking a much more active role in the day-to-day aspects of managing the building level technology.

Well the news isn't all bad, and with a few simple steps, you too can be a 21st century building administrator.

Lead the Way

As the instructional leader in the building, technology is no different from the other programs you oversee. Technology can and should be part of good pedagogy and not an additional isolated program or tool.

School technology programs are a significant investment in money and time and as such, it is important to evaluate its purpose and intended outcome prior to implementation. When technology is integrated into existing programs, it makes sense for teachers and can often save time for everyone if implemented thoughtfully. Here are steps to help get you started toward taking control of your school's technology integration:

1. Gain an Awareness of Technology Tools and Trends

By expanding your own technology awareness, it will help you keep abreast of new innovations and trends and be a resource for your staff as well. For example, it has been widely publicized that Interactive Whiteboards are becoming ubiquitous in classrooms across the country – but what else is there? Ten years ago if students were fluent in the basics of Microsoft Office applications, we did our job well. Not today. Students are spending more time online than ever before, using social websites such as Facebook, Myspace, and blogs. Some of these tools are showing up in classrooms, providing students with tools that are meaningful to them in their multi-tasking, web centric world.

Some common applications that are being used are Web 2.0 tools – applications on the Internet designed to accommodate the sharing and collaboration of information.

Some of these tools include the following:

- Blogs (weblog) – an interactive environment where students and teachers can pose a topic soliciting feedback from others, generating pages of discussions and comments around a variety of concepts and ideas.
- WIKI – A collaborative online environment where a web page can be contributed to and edited by multiple users. Students can collaborate on projects and concepts easily using this tool. Wikipedia is the most common example of this.
- Google Docs – productivity applications on the web that closely resemble the Microsoft Office suite (Word, Excel, Power Point) and provide a platform for collaboration between invited parties.
- Online Databases – Subscription based databases provide a commercial free safe environment where

students can obtain reliable and relevant information. This provides a process for schools to harness the power of the Internet in a controlled manner. Many of these databases have relatively low annual costs and are well worth it. Get your library media specialist on board for this – they should lead the charge to develop research protocols and resources for students and teachers.

Adopt metric(s) for Assessment of Technology Integration.

We know that Interactive Whiteboards are the latest trend in classrooms and as such we find ourselves asking, “What has changed with this new technology?” On a recent classroom visit we saw a teacher using PowerPoint with an Interactive Whiteboard. The lesson included colorful graphics, sound, and other visuals, but we found ourselves wondering; “what the inclusion of the Interactive Whiteboard did for the lesson?” Was the Interactive Whiteboard only reinforcing traditional “chalk and talk” teaching methods but using new technology? Could this teacher have accomplished his/her objectives with a less expensive solution of a projector and screen? By contrast, in another classroom a teacher did a demonstration about compound words where the students were using the Interactive Whiteboard, creating sentences, talking among themselves - totally engaged in the learning. We all have had a tendency to get side tracked by the technology and overlook the principals of teaching and learning in the process. So, how does an administrator know how to evaluate effective use of instructional technology in the classroom?

As a way to create benchmarks and assessments for technology, schools are adopting technology standards. This insures that technology integration is consistent and thoughtful. A good place to start is the ISTE National Education Technology Standards NETS (www.iste.org/nets). These standards were developed in 1998 with updates to the student and teacher strands in 2007 and 2008. Of particular interest to administrators will be the NETS for administrators.

The new free ISTE Classroom Observation Tool (COT) assists administrators in the evaluation of classroom lessons that infuse technology. Using a notebook computer, an evaluator can record multiple measures of student engagement and share this data with the teacher. The system can produce analytical reports. Your data can be downloaded into other programs for statistical analysis. In addition, evaluations can be stored and shared in a single database. (<http://icot.craftyspace.com/>)

2. Individual Proficiency with Appropriate Technologies

Becoming proficient in your own technology use can be helpful when assessing technology integration practices for your staff. Modeling the use of technology in your own practices will send a powerful message that not only sets an expectation for them; it demonstrates to those reluctant users it isn't so hard. Creating a short PowerPoint presentation with a video for a staff meeting can go a long way.

Mastering your own technology does not require you to be an expert, but it conveys the expectation to your staff that you expect meaningful and thoughtful use of the application of technology.

3. Awareness of the Impact of Data Driven Decision-Making

In this environment of high stakes testing and accountability, working with data can be an important asset in your accountability toolkit. The good news is that you do not have to take this task on by yourself. Under NCLB legislation, most states are required to uniformly test children. These test results are available to you through statewide data repositories of some fashion either at the local or state level. Check with your local SED to find out how you can get access to this data if you don't already know.

This can take several forms, but starts at the administrative level progressing on to delivering data at the teacher level to make instructional shifts based on the data in a timely manner.

4. An Understanding of the Relationship Between Hardware Acquisition and Staff Development

As the instructional leader in the building, school principals advocate for resources while balancing training along side other initiatives that compete for scarce resources. Too often technology staff development is determined by central office using a survey of the staff, asking them what they want help with. These results often show a disconnect from instructional objectives. While surveys can be helpful, why survey the staff in technology but not in any other area of instruction? Successful models of technology staff development are grounded in concrete instructional goals and are connected to curriculum.

5. Knowledge of the Unique Facets Surrounding Financing Technology Including the Importance of Equipment Replacement Cycles

One of the challenges facing today's schools is maintaining the continued funding of the district's technology program. Technology, unlike some other school programs, requires an ongoing investment in hardware, software, and staff. Like a home computer, school computers have relatively short lives, but unlike home computers some are in use eight periods every day and as such need to be replaced on a shortened cycle. The reality is that computers installed several years ago simply cannot perform at the level necessary for today's multimedia applications. Some common expenses include the following:

- Replacing computers every three to five years
- Infrastructure upgrades (closet electronics and servers)
- Software upgrades (operating systems, maintenance and instructional software)
- New technology (e.g. Interactive Whiteboards)
- Software subscriptions (e.g. Online research databases)
- Computer storage and bandwidth
- Professional development
- Technical support staff
- Associated costs for added connectivity (e.g. cabling, electric)
- Printing (cartridges and access to)

School leaders are involved in planning budgets for new programs, courses, books, staff, and more. Including technology as part of the planning process make sense as part of the shift toward taking control of the building technology.

To properly advocate for your building, get a general knowledge of what technology is currently in place, how and where it is being used. How many computers are there? How old are they? What is the plan to replace older obsolete computers? Most people replace their home computers every three to four years. So, when schools still have computers that are five, six, or seven years old, principals need to know the limitations of the systems and plan their expectations accordingly. This information is usually available in the district's technology plan, or from the technology coordinator, or the technology teacher/leader in the building.

6. Collect Best Practices of Common Frameworks to Empower Teachers.

Every school can and should engage in discussions around the technology they use for instruction and be proactive about how it is applied to instruction. A school based technology committee can provide the framework for technology acquisitions, budgeting, software, integration and routines. Staff members will become empowered when they are part of the decision making process.

Other areas that local technology committees can take on include:

- Software selection
- Scheduling computer labs, cameras, and other equipment
- Student and staff technology competencies
- Requests for equipment upgrades and modifications

With a common forum in place for discussions and brainstorming, staff members feel more comfortable and take ownership for any decisions that they were part of.

Conclusion

As resources for schools and districts become harder to come by and competition for existing resources increases, the best action a building administrator can take is to become an advocate for instructional technology at the school level. In the same way a principal might advocate for a needed instructional program, the same should be done for the technology resources in the school.

The best way to do this is to take the lead for your building first by understanding what is in place and what purpose it serves to the instructional or administrative goals and function of the building. Establish maintenance and growth models that will be supported by data, observation, and anecdotal evidence of the staff. By modeling the technology, the building administrator now has the trust and support of the staff to solicit the necessary financial support for their technology program – like any other program.

Remember, it is a lot easier for someone to take something away from you that you didn't even know you had and much harder to get it back once you realize the loss you have suffered. Don't let that happen in your school – be the building advocate for instructional technology.

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