A Dozen Practical Considerations for Today's Technology Leaders

~BY WALTER MCKENZIE

As school district technology departments have evolved, staffing, planning, and budgeting models have run the gamut, leaving today's technology landscape a patchwork of programs. No one model has gained consensus as a single, replicable solution, largely due to the varied political and fiscal realities of a given locality. Over time, the most efficient and effective program models will become evident. In the meantime, consider these principles for growing a thriving, dynamic school technology program:

1. Leadership goes beyond management.

At a bare minimum, technology departments have to keep track of inventory, licensing, and user accounts. More typically, technology departments manage student data, oversee Erate filings, and maintain anything that plugs into a wall from computers to phones to photocopiers. Given this range of demands, it is easy for a school district technology leader to be reduced to a manager of assets. Management is an important skill set, but a technology leader needs to be more than a manager. Leadership is the ability to create a systemic conceptual framework in which your program can grow and flourish. It requires the ability to espouse your goals for your program and to build consensus for those goals with stakeholders across your district and the community it serves. Serving as a technology leader means proffering a comprehensive "big picture" vision for all facets of school technology.

2. A strong technology plan requires a dynamic technology vision.

Most school districts have technology plans in place that have been approved by their local school boards. These plans outline the district philosophy, goals, objectives, and strategies for supporting school technology. This is an exercise in both planning and accountability, but it should not be an end in and of itself. A dynamic technology plan flows from your vision for the district: how technology can improve productivity and learning and support district goals. This vision should reflect the collective aspirations of your district. In articulating your vision, you provide an inclusive context in which stakeholders from across the community can become invested in your program. The fulfillment of your vision should be the ultimate goal of your technology plan.

3. Model positive expectations for technology.

Effective technology leaders model an expectation that technology is highly valued within their school district. These days it may be tempting to cut corners or even cut back on technology spending. While fiscal realities must be addressed, you must keep your eye on your vision and be faithful to its implementation. Offering to cut spending or funding short-sells your vision, sets technology back for your schools, and communicates that you do not value technology as a high priority for your district. An effective leader works to create a school culture where technology is valued as a critical component in education, not an add-on program that can be reduced or removed when convenient. Cutting corners now means having to dig your program out of the hole these cuts create later.

4. Your vision is your bond.

No one is irreplaceable, even technology leaders. You can build a program where all roads lead to your office, but there is no guarantee that you will be perceived as essential to your district. Likewise, maintaining an understaffed technology program in which each department member does the work of two or more people does not make staff indispensable. Working harder and not smarter is a detriment to growing your program, and it makes it impossible to fully support the technology that is already in place; the emphasis shifts to subsistence and survival, a negative spiral where you work to keep their heads above water. Once this becomes your priority, your vision loses its way. To ensure long-term viability as a technology leader,

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build relationships across your school community with stakeholders who are invested in your vision. It is less likely that your program is going to be cut if it is perceived as thriving and vital to your district's success.

5. School technology does not fit a business model.

Business technology models offer many helpful strategies on how to efficiently administer technology and keep up with the changing technological times; there is much we can adopt from the private sector in managing and maintaining technology. Still, schools are in the business of education, not making money. Technology leaders must be able to apply effective technology strategies in educationally appropriate ways. While technicians and maintenance staff may possess technology credentials exclusively, school technology leaders must bridge the worlds of technology and education to deliver a successful marriage in a comprehensive program. School technology leaders should have a background in both education and technology in some proportion.

6. Professional development is not a one-shot, one-size-fits-all proposition.

The key to a successful school technology program is delivering the ongoing professional development necessary to create a culture of confident technology users. In the past, training was a one-size-fits-all event: faculties were required to attend workshops and were then left to implement new skills with no follow-up support. Today's professional development should have an on-going, supportive program for encouraging staff to make use of new technology skills. An effective approach to achieve this is the "just in time" model of professional development, wherein technology integration specialists work with staff members as the need arises to learn new skills and strategies for making use of technology. This approach also offers great potential for changing the technology climate in a school building or district.

7. Education defines the role of technology.

Technology must not be the tail wagging the instructional dog. In the past, some districts have invested heavily in hardware and software only to find that it wasn't fully utilized in the classroom or didn't deliver the results that were promised, causing a technology backlash in the community. The school systems most often touted for successful technology integration have built their programs from the ground up, putting instruction first. Your technology vision should be created deliberately with consideration for teaching and learning. It is critical that you include appropriate stakeholders in your district in doing this. Putting instruction first is the only way to guarantee that technology will deliver measurable results for your schools.

8. Funding should not define the role of technology.

It is easy to lose sight of your technology vision when funding opportunities become available. As technology leader you should participate in any discussion surrounding grant and funding opportunities that include a technology component. Furthermore, grants should only be pursued which are consistent with district goals and your vision for technology. Any worthwhile grant will be looking for evidence that your district and technology programs are already well in place and that there is evidence that you have already begun implementing your vision before the grant opportunity became available. If you are not seated at the table when these funding opportunities are discussed, you never have the opportunity to be successful because you are reduced to being reactive rather than proactive.

9. Cyclical funding for school technology is a necessity.

Schools have long labored supporting generations of equipment spanning up to a decade or more in time. This is largely due to a practice of funding technology when new schools open or buildings are remodeled but not planning for the upgrading and replacement of technology between capital projects. Not only is this an expensive model for supporting technology, but it is also becoming more and more difficult to maintain systems that are eight years old or more. Technology leaders must advocate for a cyclical plan that keeps school technology current within a reasonable window of time. By including this in your technology vision, and subsequently in technology plans and budgets, a school technology program can save thousands of dollars in man hours, parts, and repairs.

10. Standardization is the key to success.

In the first great wave of school technology, districts were eclectic in their acquisition of various forms of technology. The legacy is a collection of hardware, operating systems, and software titles that are costly to support. In the next wave of school technology, effective leaders will standardize on platforms and vendors

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and charging of the laptop cart. Ongoing training for the teaching staff is also an important support requirement.

Real Life Example

A few years ago the Norwood School District purchased 6 HP mobile carts, one for each elementary school and one for the middle school. They selected a laptop model after some analysis and had the vendor, HP, quote mobile carts with this laptop model. They used a 3-year leaseback to help spread the cash flow. The elementary schools had no space available for a dedicated computer lab but did have 3 PC desktops and a printer in every classroom. Usage of these mobile carts has been growing every year, and this technology has been well received by the teaching staff.

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systems originally participating in the pilot program have had to drop out as they have realized they do not have the infrastructure in place to participate.

When the participating schools are ready, the first two tests that will be piloted online will be the seventh grade English and Language Arts composition test and the tenth grade Biology test. "It's a good mix of test formats that will give us an indication of how we would like to develop online testing for other subject areas," Viator explained.

As the pilot program moves forward, the DOE's Office of MCAS Test Development, Policy and Planning will gather data and work to prepare all districts for the eventual anticipated move to online MCAS administration. "The good news is there is plenty of time," said Viator. "No one should be worrying that they need to be ready for online testing next year. We'd like to dispel any misconception that a roll out of the program is imminent. The initiative is in its early stages."

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to cut down on expenses and make it easier to maintain systems. Microsoft, Apple, Linux, Citrix, Novell, IBM, Adobe, Corel – it's your call. What is critical is that your standards flow from your vision so that your purchasing practices reflect the move to a standard network configuration, a standard operating system platform, and a standard toolkit of instructional applications acquired with site or district licenses that can be pushed out through a central application server. Likewise, standardization makes it easy to ghost machines when files become corrupt or systems become infected. Standardization is the future for successful school technology programs.

11. Instructional and administrative technology are separate entities.

Your vision for instructional technology should be planned and provided for separately from administrative technology. In tight economic times it is tempting to throw the entire technology budget line in one pot to meet the needs of both teachers and administrators from a single source. This requires you to support both interests as well as you can, and in the end one or the other is left holding the empty bag when money runs out. Providing for administrative hardware, software, and training should come from a budget line separate from instructional technology funding. This helps to identify the distinct needs of each so that you can plan accordingly across budget cycles. You should be able to provide for the needs of students, teachers, and administrators in one comprehensive program, but lines should be drawn to protect the funding that sustains each component.

12. School technology will change dramatically over the next ten years.

When we say "school technology," we typically think of monitors, towers, keyboards, and mice because they have dominated the digital landscape for the past twenty years. As technology leaders, however, we need to be looking forward and anticipating that computers, computer labs, and traditional software will soon be outdated. In the short term this reality is evident as Apple and Microsoft offer new platforms with major changes in file structure and multimedia delivery. But these changes are minor compared to what the future will bring. Clinging to current models of school technology will inhibit our ability to grow a vision that keeps up with future changes in technology and education. Technology leaders must work to evolve their conceptual frameworks even after they have created their initial vision for their programs.

These dozen ideas may spawn as many questions as they do answers. This is not a bad thing. Some technology leaders already understand these ideas and view them as common sense, but there are many school technology program leaders who are not yet considering these realities in their everyday practice. I encourage everyone to share these ideas, discuss their implications, and expand our collective thinking on school technology leadership. Together we can build consensus as a profession, espousing a vision for technology that will serve us well as we head deeper into the Information Age.