



Does Your District Need a Technology Audit?

The tech audit is a prime example of data-driven decision making and how appropriate research and evaluation tools can be used to provide useful information for district planning.

Most districts are required by law to conduct a yearly financial audit, during which an independent third party examines the district's financial statements and writes an opinion on whether those financial statements are relevant, accurate, complete, and fairly presented. Similarly, some schools engage independent firms to conduct curriculum audits to determine if what they are teaching in their classrooms is aligned to their published curriculum documents, and whether their published curriculum is aligned to what is tested on state and national accountability measures. However, although technology is a major line item in most districts' budgets, few districts engage independent organizations to conduct technology audits.

What are the advantages of a technology audit? A comprehensive tech audit provides a district with broad, objective information about the efficiency of its existing network. Primarily, it provides a view of:

- How teachers feel about using technology
- How teachers and students actually use technology in the classrooms
- Barriers that might prevent effective use of technology
- The effectiveness of existing technology-related professional development
- The effect of technology-related district policies on the integration of technology, and
- The perceived effect of building and district leadership on technology integration in the classroom

A good auditor is free of local bias or ownership of the existing situation. He or she does not

“sell” anything; rather, an auditor's job is to provide an analysis of data. A tech audit for a medium-sized school district will likely cost between \$20,000 and \$50,000, depending on the number of schools and scope of the audit. For example, a district might only want an analysis of the network server topology, or they might want a more detailed look at each school's subnet and a security analysis. Once presented with these data, a district can begin the process of developing a technology plan that measures more than the “wires and pliers” aspects of technology. The district can develop a tech plan that is integrated with and supports the school improvement plan—a technology plan that is focused on student outcomes rather than district inputs.

Collecting the Data

Several data collection tools are available to auditors, beginning with a thorough analysis of the physical structure of the district's network. The first step is for the district to *provide documentation* of its network and a copy of its current technology plan. The auditor examines this documentation and verifies its accuracy with an onsite visit. Some of the questions an auditor asks include:

- Does the design of the network provide sufficient connectivity capacity for the users it supports?
- Have processes been implemented to safeguard the future viability of the system and the data residing on the system in the event of a malicious or catastrophic event?
- Can users of the network complete the work necessary in support of the district's mission?

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- Are the computers sufficiently configured to support the various work activities of users?
- Is the technical support group satisfactorily staffed to effectively support the systems and end users?
- What processes have been implemented to allow for efficient management of the district's deployed software and hardware?
- What planning processes exist for the upgrade of hardware and software assets to stay technologically current?
- Is a process in place for the technology support group and teachers to communicate about the district's future direction in education technology and any challenges they might encounter?

In addition to this comprehensive look at the physical network, a quality technology audit includes the perspective of the users—staff and students. One way to begin this process is to *survey every teacher* in the district using an online tool. This online survey should include questions about teachers' comfort with technology, their perceived level of technology expertise, how students use technology, and any barriers they perceive as keeping them from fully using technology as a teaching tool.

Following the online survey, auditors should *conduct interviews* with a few individuals from every building. This sample usually includes the building principal, technology teacher, and at least two other classroom teachers. Interviews also should be conducted at the district office and include representatives of the IT department, curriculum and instruction, assessment, and other groups that the district identifies. Interviews are particularly rich resources for data about professional development, real or perceived barriers to implementing technology, perception of the leader-

ship's support of and knowledge about technology, and specifics about how students use technology.

Another strong data collection tool is the *focus group*. Focus groups should be composed of staff members, parents, students, and business leaders, and allow the auditor to clarify concerns that arise in the survey or during the interviews. They also allow for a more robust data set from which to draw conclusions.

A final data collection tool is a *building walkthrough*. There are two primary reasons to visit each classroom in a district. First, it is important to see firsthand how technology is deployed and how it actually is used by students and teachers in the classroom. The second goal of a walkthrough is to verify statements made during interviews and focus groups. For example, if the principal states that students use technology in every classroom on a regular basis, and the auditor only sees unused technology stations and labs, that disparity needs to be addressed.

Data Analysis

After all data is collected, the auditor combines it and looks for common themes to emerge. These themes become the primary sections of a written report. It may be necessary during this process to talk with district staff to verify or clarify statements or observations. It is typical for an auditor to enlist the assistance of a peer reviewer, someone knowledgeable in both technology and school improvement.

Final Report

After a period of time, usually two to four weeks, the auditor will present a final report to the district. This presentation often is limited to the district's executive cabinet or a similar group. At the superintendent's discretion, the audience might also include building principals, curriculum specialists, and

even board members. It is important to remember that the purpose of this audit is to shed the clear light of day on the district's current state of technology implementation. The wider the audience, the more likely that action steps will result.

Follow-up

A technology audit will only be of benefit if the district uses the data from the report in a constructive manner. Some organizations that offer tech audits also provide additional assistance. A good tech audit will be an objective and independent tool that will suggest a process rather than a product. Be leery of an audit that implies that the auditor's organization can and should serve as a one-stop solution.

Most audits will suggest types of professional development that will help a district move forward. Remember, what worked in one district may or may not work in another. Insist on seeing the research behind all professional development. Professional development that is built on a solid research base will have a higher likelihood of success. Ask for a list of clients, and make some phone calls.

Conclusion

A comprehensive technology audit as described in this article is not an inexpensive process, but the money spent will be worth the investment. Unless you are able to say with assurance that your technology dollars are being maximized, your technology instruction aligned to your curriculum in a coherent manner, your staff well-trained and knowledgeable on how to use technology within the curriculum, and your student achievement enhanced by technology, you should consider investing in a tech audit. The money invested in this process will reap benefits in the long term. ■