# TECHNOLOGY PLANNING

## A GUIDE FOR SCHOOL BOARDS

The impact of computer technology on society promises to be greater than the introduction of steam power and the Industrial Revolution. Technology has increased so rapidly that it has been estimated available computer power is doubling every 18 months—and the trend is expected to continue into the foreseeable future.[1] Internet connections are increasingly faster, cheaper, and more readily available for individuals and institutions. Technology clearly has the potential to change how we work, teach, and learn in our schools.[2]

Since the first affordable computers appeared on the market, the academic world has struggled with how to use technology in the curriculum. Today, school boards are feeling increased pressure to integrate the use of technology into their schools. To ensure the successful use of technology in the classroom, school boards need to follow these five key steps: visioning, planning, modeling, funding, and training.

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### Visioning

Ronald W. Costello, director of secondary education in Noblesville, Tennessee, believes that "technology will never provide the changes in education that it should until we create a local vision of how technology should impact how we work, teach and learn."[3] Unless there is clear evidence that technology will enhance children's learning, teachers and administrators will resist implementing high-tech programs. The solution is to merge our individual dreams for education and technology into a single, shared vision. For successful visioning, three key groups need to be involved: parents, community, and staff.

For the school's primary constituency (parents)to share in this vision, they must understand how it will benefit their children. School administrators and boards should solicit their input through surveys, phone calls, and direct involvement. Parent representatives need to be included in all phases of creating and implementing technology. Their enthusiasm and commitment will help encourage those who are reluctant—including staff and other parents.[4]

Community involvement in technology planning and implementation is critical. Schools need to become acquainted with and to take advantage of the wide range of resources available in the community. This is an excellent opportunity to develop partnerships, positive relationships, and deeper involvement with business and community leaders.[5]

Getting the teachers to share the vision is perhaps the most important aspect of integrating technology into the classroom. Without staff involvement, it is unlikely that technology will be used to its fullest potential in the classroom. School board members should encourage staff involvement throughout the planning process, program coordination, and staff training.[6]

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mutual vision of where technology will take us, then it will be difficult to set priorities, to know where we are headed, and to know when we have achieved what we are trying to accomplish."[7]

## Planning

Once the board has developed a shared vision of how technology will impact the school, it is necessary to plan how to achieve that vision. The board should begin this process by forming a technology committee,[8] being sure to involve those who have a passion for technology to serve on this committee. Members should be selected carefully, making sure that their diversity represents the school's constituency.[9] The group should include parents, staff, and technology professionals. Only a few schools have realized the importance of the involvement of a technology professional in planning for technology and facilities.[10]

When it comes time to write a technology plan, you can simplify the task by finding an existing model to use as a guide.[11] Modify it as necessary to ensure that it reflects the shared vision of technology you have developed. Some examples of model plans and guides may be found on the Internet.[12]

## Modeling

Educational leaders must themselves become involved in planning and implementing technology. The goal of having students learn in a technology-rich environment will be achieved only when their teachers and other school leaders creatively use technology and model its use.[13] Teachers, principals, and board members set a good example by using

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the computer in meaningful ways.

One simple way of doing this is by using E-mail for communications. This application breaks down barriers for many reluctant users. The board chair can begin by communicating board minutes, agendas, financial reports, and other information by E-mail before the board meetings. Products such as Microsoft Office2000 provide for extended collaboration and sharing of resources over the Internet. This will encourage other board members, educational administrators, and teachers to turn on the computer and check their messages on a regular basis.[14]

Board chairs and heads of subcommittees can make good use of the presentation software that comes with modern office suites, such as Microsoft Office and WordPerfect Office. It's not necessary to be a genius to use this software. Most packages today come with helpful instructions that walk you through the steps. The impact in terms of leadership and communication will be well worth the time spent to become familiar with the software.

**Funding**

Technology funding must appear on the budget every year.[15] When planning the school's budget, the board should include two categories relating to technology: equipment maintenance and new technology.

The first deals with repair and replacement of existing equipment, service agreements, and training of staff. It will do more harm than good for new technologies to be launched while letting existing equipment go unused because the staff is untrained and the equipment is not maintained.

However, schools must also make funds available for new technologies and programs. This includes not only equipment, but also technical support and training of staff. It is more important to make steady progress forward than to unrealistically assume that one day funds will be available to do everything at once.[16]

While technology costs need to be included in the school's operating budget, these funds do not have to come entirely from traditional sources such as tuition and church subsidies. Parent groups will often come up with creative ideas for fund-raising if they are informed of a need at the school. Schools should also seek to develop partnerships

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with the business community. This will give teachers and students a better sense of how the work world uses technology and suggest ways to involve the community in funding the school's technology program. Other sources of outside funds include grants and technology fund-raisers. Grant-writing information is available on the Internet.[17]

## Training

A good staff training program is the key to successfully implementing any technology plan.[18] Unless the staff is trained in the best use of the technology, the equipment will go unused.[19] Technology is used most creatively and effectively when a master teacher understands how to incorporate it into his or her instruction to orchestrate the flow of learning.[20]

Staff training can begin even before any technology plan is in place. A good way to begin is to allow the staff to take the school computers home on weekends, holidays, and vacations. Be sure to set up a support network so they will have someone to call if problems arise.[21] Also, teachers will be more likely to get on board with technology if the board and educational administrators show their commitment by paying for the teachers to attend technology workshops, and providing substitute teachers while they are away.

Another training strategy, peer mentoring, has also proved successful. Staff members with technology expertise spend time with those who have little or no experience, helping them become comfortable with the equipment and working with them on classroom technology projects.[22]

## Conclusion

Integrating technology into the classroom can be a daunting challenge. But research has consistently shown that leadership is the key to successful implementation of technology. Teachers will use technology to its best advantage only when principals and school boards assume leading roles in modeling and helping the schools achieve this potential.

At the same time, educators must recognize that technology is not the answer to all their problems. But good teachers can become even better when they integrate technology into the curriculum to create a powerful tool for learning. By following the steps outlined here, schools can begin to use technology in practical ways. Even if this means starting with small steps, once technology starts to catch on, the growth in enthusiasm and excitement with technology will be exponential.✎

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18. McDaniel, p. 18.
19. Huntington.
20. Kinnaman.
21. Huntington.
22. McDaniel, p. 19.

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*Board members should set a good example for teachers and students by using technology in creative ways.*