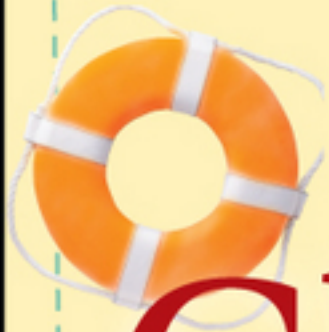


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THE  
**Classroom  
Teacher's  
Technology**  
SURVIVAL GUIDE

**DOUG JOHNSON**



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# **The Classroom Teacher's Technology Survival Guide**

DOUG JOHNSON

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*This book is dedicated to the caring teachers, librarians, and administrators of the Mankato Area Public Schools who teach me every day.*

*Special thanks to Anne Hanson, Mary Mehsikomer, Miguel Guhlin, and Blue Skunk readers who offered suggestions for improvement to early drafts of this book.*





# About the Book

*The Classroom Teacher's Technology Survival Guide* has been written for educators who want good teaching, not technology, as the focus of their classroom.

Starting with a simple strategy for thinking about the “big picture” of technology use in schools and some basic questions and answers about computers, software, and networking (for example, What type of computer should I have?), the book outlines pragmatic ways all teachers can use computers, the Internet, digital cameras, and other technology tools to enhance their professional productivity.

The book includes dozens of strategies a classroom teacher can use to both enhance current educational practices and create motivating project-based units. Practical advice on creating good project assessments, handling the potential distractions technologies may cause, and dealing with issues of safe and appropriate use provides guidance for teachers at all grade levels. The book concludes with suggestions about how educators can help determine their own “technology future” and suggested resources for further study.

Peppered throughout each chapter are “survival tips” I have discovered in my nearly thirty years of work with teachers and technology in schools. Designed to be readable and realistic, this book can help any educator turn technology into a genuine tool for enhancing teaching and learning.





# About the Author

**D**oug Johnson has been the director of media and technology for the Mankato (Minnesota) Public Schools since 1991 and has served as an adjunct faculty member at Minnesota State University since 1990. His teaching experience includes work in grades K–12, both here and in Saudi Arabia. He is the author of five books: *The Indispensable Librarian*, *The Indispensable Teacher’s Guide to Computer Skills*, *Teaching Right from Wrong in the Digital Age*, *Machines Are the Easy Part; People Are the Hard Part*, and *School Libraries Head for the Edge*. His long-running column “Head for the Edge” appears in *Library Media Connection*. Doug’s Blue Skunk blog averages over fifty thousand visits a month, and his articles have appeared in over forty books and periodicals. Doug has conducted workshops and given presentations for over 150 organizations throughout the United States as well as in Malaysia, Kenya, Thailand, Germany, Poland, Canada, Chile, Peru, Brazil, Egypt, Jordan, the UAE, and Australia. He has held a variety of leadership positions in state and national organizations, including the International Society for Technology in Education and the American Association of School Librarians.





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# Introduction

## Why This Book?

As a veteran classroom teacher, I always dreaded my administrator going to a conference. Invariably she would return with a new educational “silver bullet” for improving teaching and learning and expect us teachers to implement it. This usually meant a ton of additional work despite our being already very, very busy actually teaching. And unfortunately these new processes, techniques, and plans were abandoned when the next silver bullet rolled around. Yesterday it was “outcomes-based education.” Today it is “essential learning outcomes.”

A survival strategy that many of us adopted was to keep doing what we’d always been doing but use the vocabulary of the new thing. We’d keep quiet during staff development sessions and quietly pray, “This too shall pass.” It was difficult not to become cynical about any change effort in school because we knew there would be another initiative coming before we could finish implementing the first one.

The use of information technologies in schools is a different matter. As we look at society in general, technology has had and continues to have a powerful impact on the way things are being done. No one would think that medical CAT scans, online banking and shopping, or computerized diagnostics of motor vehicles are a “passing fad.” And to think that the use of technology in schools is a passing fad doesn’t make any sense either.

At the same time, both administrators and teachers are finding they need to work together to meet the ambitious objective of reaching *all* students. Change must be meaningful, effective, and practical. The only way to achieve this kind of change is through teacher-principal teamwork on common goals.

Classroom teachers have a finite amount of energy and time to devote to change. So why not invest in the kinds of changes that will be with us not until the next silver bullet comes along but for the remainder of our careers? Why not consider

making changes that consistently benefit our students? Although technology does change—sometimes at what seems to be an impossibly fast pace—the basics of its use in education have been and will be with us for many years.

This book is about the basic use of technology in the classroom. It's written for teachers who do not consider themselves technology enthusiasts but who still want to harness the power of the tools and strategies that can truly improve their instruction and the learning experience of their students.

If you are a teacher who wants the benefits of using technology but who also wants to lead a normal life away from a keyboard and monitor, read on.

## Why Is an English Teacher Writing This Book Instead of Bill Gates?

My approach to technology perhaps can be explained by the circumstances under which I started using it. As a half-time librarian and half-time English teacher in a small junior high school, I found an Apple II computer sitting on my desk at the beginning of the 1982 school year. Yes, dear readers, *I am* older than dirt. I was pretty darned mad that (1) somebody had decided the school needed a computer in the first place, (2) the library budget was used to buy it, and (3) I was supposed to be the one to figure out the dumb hunk of plastic.

After three rather frustrating days, I produced my first half-page memo using Apple Writer, a daisy-wheel printer, and more patience than I ever thought I could muster. But by the time I finished the memo, I was deeply in love with the little machine.

The Apple II and its word processing program, both primitive by today's standards, were a writer's dream. They compensated for my bad spelling and handwriting. I could revise without retyping an entire document. My printed documents looked professional. My students could read rather than decode my tests and worksheets.

Then a little lightbulb appeared over my head. "I teach seventy-five kids every day who struggle with their writing as well. If this thing helps me, just think what it might do for them!" I couldn't wait to share my enthusiasm with my seventh graders and fellow teachers.

Over the past thirty years, I've fallen in love quite a number of times with these silicon-enhanced creatures. I am enamored yet of how productive spreadsheets, databases, and multimedia presentation programs have made me. It's tough to imagine having to be separated from e-mail or the information resources of the Web even temporarily. My smartphone goes everywhere with me. I spend an increasing amount of time learning from distant fellow professionals through social networking tools: blogs, wikis, Facebook, and webinars.

This is not to say that these relationships have always been easy. I am not, by nature, a techie. Even the remote controls in the family room exacerbate my

IDS (Intelligence Deficit Syndrome). In schools, I've watched teachers spend too much time trying to learn poorly designed technologies and use technology for entertainment rather than real engagement. I shudder when schools take a "ready, fire, aim" approach to technology planning by buying often-expensive gizmos and then running about looking for problems those gizmos might solve. Even more frustrating is when schools buy expensive gizmos and don't provide teachers with adequate training in how to use them—that is, in both how to operate them and how to employ them as tools to deliver instruction. I worry that monies spent on technology in schools might be taken from the budgets of other programs that might have greater value to kids.

My love of technology is conditional, and that is what this book reflects. You will find my ideas informed, practical, and perhaps even a little skeptical. But most of all I hope you find the ideas in this book useful when seeking ways to benefit your students with the judicious use of technology.

I'd be delighted if you were to e-mail me about anything I write in this book at [dougj@doug-johnson.com](mailto:dougj@doug-johnson.com). I look forward to reading *your* ideas.

## Creating the Essential Conditions Needed for Successful Technology Use

A lack of support is a primary reason why teachers haven't more rapidly adopted technology. The list in the sample letter that follows summarizes essential conditions that teachers need if they are to truly integrate technology into their classroom in meaningful ways.

### Dear School Leader . . .



Dear School Leader:

Let's work together to create an environment that will help maximize my success when working with technology in the classroom. These conditions will help me a lot and show that technology integration is something you care about.

- ❑ **1. Make teaching students technology skills a district priority.** Until the high-stakes tests and state standards require that I teach technology skills, I must focus my teaching efforts on what *is* tested and mandated. Our school board goals are all about reading, writing, and math. Until you tell me

technology skills are important for my students to master, I can't spend a week in a computer lab teaching something such as writing a complex sentence or designing a chart that I can teach in a day with paper and pencil.

- ❑ **2. Show me research demonstrating that using technology is more effective than traditional methods.** Until there is unbiased research that shows I can teach basic and content-area skills using technology more effectively than I can using traditional methods, I am reluctant to change how I teach. After all, I do a pretty good job now. Unless research indicates that spending money on technology will help me do a better job, I feel I need to continue to advocate for school budgets that spend more on smaller class sizes; library, art, and music programs; and services for students with special needs.
- ❑ **3. Provide technology in my school that is reliable, adequate, and secure.** I use the telephone, the overhead projector, and the VCR in my classroom because I can count on them working. I'm reluctant to use computers, LCD projectors, interactive whiteboards, the Internet, and any other new devices unless they work 99 percent of the time. If you ask me to create separate lesson plans for when the technology works and when it doesn't, I will suspect you were never a classroom teacher yourself. If I have thirty children in my class, please provide thirty computers that actually work in the lab or on a laptop cart. Help me find ways to reduce my worries about online stranger danger and inappropriate Web sites.
- ❑ **4. Show me that technology use is safe and developmentally appropriate.** Science just hasn't shown the impact on small human beings of staring at computer screens or using keyboards. We do know childhood obesity is on the rise because too many children are inactive. Please let me know when playing with blocks on the screen is proven to be as developmentally beneficial as playing with blocks on the floor.
- ❑ **5. Hire or develop technology support people with interpersonal skills.** You know that I am neither a child nor an idiot. I don't like it when techs treat me like one. Please provide me with technology instructors who let me run my own mouse when learning even if it takes a little longer, who use layman's English when explaining, and who tell me only what I need to know. Cut out the cute asides like calling a problem an SUD (Stupid User Dysfunction). I know what such acronyms mean. I also need timely technical support. If I have to wait three days to get my computer working again, can you blame me for developing a negative attitude about using it?

- ❑ **6. Ensure that all technology comes with effective training.** Classes about a technology that I *might* someday need—taught by an instructor who hasn't been near a school lately—too often feel like a waste of my time. Teach me in a small group about the things I need to do *today* to be effective. And how about a little follow-up? Please give me time to connect with my peers about what we have learned, what's working, and what isn't. We are finding professional learning communities effective in implementing other kinds of pedagogical change.
  
- ❑ **7. Support technology that is genuinely time-saving.** Please don't ask me to learn how to use a technology to make someone else's job easier—like the technology department's or the administration's. I don't have time to log into my computer on three separate screens to get to an application, especially when the required usernames and passwords are long and impossible to remember. I really do understand the importance of security, but it needs to be balanced with convenience.
  
- ❑ **8. Most of all, please remember that, as a teacher, I consider myself first a child advocate, second an educator, and only third a technology user.** We'll make a great team if you think of yourself in those terms as well.

Sincerely,  
Norm L. Teacher