

Technology Audit Survivor's Guide

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Praise for

Technology Audit Survivor's Guide

Great compilation of information. I find the information you give us to be great insight on what's ahead. Very well done!

— Jay Harding
Systems Administrator: Technology Integration & Staff Development
Nashua School District • Nashua, NH

I think you have a winner, Larry! I like the easy style and personable approach of your writing. For those of us who know you, we can hear your voice as it is read. I appreciate the common-sense approach to the writing and the way you explain the importance of conducting a technology audit. Educators know they can't do business the way they have over the past several years. Accountability is something we all need to embrace as a way to improve what we are doing currently!

— Rae Niles
Director of Curriculum and Technology & Apple Distinguished Educator
Sedgwick Public Schools, USD 439 • Sedgwick, KS

I am so glad I took the time to read your manuscript! I found it to be extremely practical—with tips and ideas I can start to use today. I especially appreciated the overall tone of the book. I felt like I was sitting in your living room. The book is easy to read and should be easy to implement. Thanks for this valuable information in a clear and concise format!

— Kathy Biernat
Computer Teacher
St. Charles Borromeo School • Milwaukee, WI

Very needed topic. Thanks for doing this, Larry!

— Raylene Renfrow
Former Executive Director of Technology Services (Retired)
Grapevine-Colleyville Independent School District • Marquez, TX

I found this book to be well-organized, informational, and thought provoking. The audit procedure is presented in an easy-to-follow, step-by-step manner that is up-beat and positive in nature. If the book is read in the manner it is offered, it will provide the reader with a well-defined road map that will assist with gathering and evaluating valuable information. I am truly awed at your ability to think to the future!

— Kris Vassos
Teacher & Apple Distinguished Educator
Mount Laurel Township School • Mount Laurel, NJ

A valuable resource!

— Dr. Dave Edyburn
Professor
University of Wisconsin-Milwaukee • Milwaukee, WI

The Survivor's Guide is both enlightening and challenging. This book shows the powerful ways to embrace the audit process and enlist the support of the entire learning community in preparation for it. This book is a very "readable" work; I can recommend it to my colleagues who are engaged in technology planning at the present time.

— Bob Hudson
Director of Federal Projects and Technology & Apple Distinguished Educator
Hawthorne CCSD #73 • Vernon Hills, IL

I appreciate your writing style—it's conversational, your personality shines through, and the content is easily read and digested—just a nice "flow."

— Kathy Shirley
Technology and Media Services Coordinator & Apple Distinguished Educator
Escondido Union School District • Escondido, CA

This book is easy to read. It conveys your warm speaking style and offers a great deal of practical information. I believe someone could use it as their guide to how to conduct an audit.

— Dr. Terrie Gray
Consultant & Professional Improvement Architect
Paradise, CA

A technology audit can be a threatening and stressful experience. Dr. Anderson's "Survivor's Guide" recognizes the important roles that every member of the greater school community plays in assuring that the audit is, instead, a successful and empowering experience. Dr. Anderson's positive spirit throughout this book encourages participants to celebrate the opportunity to improve the audit process. It inspires participants to work together and strategize to do what is needed to ensure a successful audit with an outcome that will best enhance learning.

— Julene Reed
Director of Technology & Apple Distinguished Educator
St. George's Independent Schools • Collierville, TN

Technology Audit Survivor's Guide

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Foreword

I have had the privilege of becoming acquainted with many of you who are working diligently in school districts to make sense of all the activities associated with demonstrating accountability for your technology-related decisions. Some of you have expressed excitement about the many opportunities that lie before you; others of you have expressed disdain for what you consider an imposition upon your decision-making territory. It is this latter group who I hope to help most with this book.

My hope is that, as we move through this manual, you will imagine that you are sitting around a table with a group of your peers and that you have invited me to join you. Imagine that you have brought your technology plan with you. You realize that I have had significant experience working with schools and many other types of organizations on their technology plans, attempting to ensure pragmatic infusion of technologies into their regimens. Of course, I recognize clearly that you are right there on the metaphorical firing line and you know best what your school and its students need. So, during this time together, you have asked me to “walk you through” a process that will help to ensure current and long-term success in showing others the extent to which you are accountable for the resources that have been placed in your trust.

Let’s imagine that I am sitting there with you and your friends at your table. I am serving as your personal “coach,” as we step methodically through this technology audit process, because we all realize that **the benefits of this make it worth all our efforts!**

My first question to you might be, “Tell me, in priority order, the main things your technology plan states that you will do over the life of your current planning document.” Clue: If you can’t tell me as soon as I finish the question, I content that either you don’t really know, or not everyone agrees and has “bought in” to your plan, or your ideas are sprinkled throughout your planning document in a vague and disconnect way.

Is there a remedy for this?

Sure!

Would it be helpful to you and your colleagues to have these concepts identified clearly and shown specifically?

Absolutely!

Thus, we have this book to guide us as we move through the process together—as a team.

A great deal of discussion in this book focuses upon the “stuff” of technology—the computers, wires, switches, devices, etc. This is a necessary discussion, for we cannot achieve optimum success in student achievement and academic excellence without these supporting mechanisms.

It is crucial that I make the point, though, that all this techno-stuff exists **for the purpose of** supporting learning. Why else would the school exist? The *techno-stuff* is actually unimportant when compared to **people**. For me, technology is a “people thing.”

So, while we are auditing the “stuff” of technology in many ways, we are doing so with the central focus upon achievement (and not just the very limited achievement results that we get from sterile standardized tests) in multiple realms. In addition to student achievement, we are quite interested in improving other aspects of the school culture:

- intra-district communications
- professional personnel
- community involvement
- partnerships
- resource development

As a preface to the book that follows, though, I would be grossly remiss if I did not point out the reality of my philosophy—that the “who,” “why,” “when,” and “how” of instructional technology is far more important than the “what.” At the same time, I realize fully that the “what” is a necessary ingredient in the success I achieve as I use modern technologies to extend my learning capacities. I need the boxes, wires, and switches to enable me to engage my problem-solving skills, to dig deeply into a research initiative, and, yes, even to write a book about technology use!

My sincere hope is that you find this book rewarding. I hope you find it a bit challenging at times, as well. And, maybe even a bit disturbing (or provocative, at least). Of ultimate importance, though, is that you find it **useful**.

I do not claim that this book has all the answers. I don’t even claim that it is the ultimate, complete guide. However, I do feel that it will provide you the very best resource for a meaningful, comprehensive technology audit available in the marketplace today. I encourage you to read this book, mark it up with your comments, share it with others, and then plan to attend one of the TAME (Technology Audits Made Easy) seminars conducted by NCTP so you can learn more and obtain the confidence that will help assure a successful technology audit.

As you have ideas related to technology auditing, as a philosophy or concept, or ideas about how to improve the process of tech audits, please let me know. I welcome your emails to: larry@nctp.com Be sure to visit the NCTP web site (www.nctp.com) for materials to help you, as well.

Best wishes to you all!

Acknowledgments

Where would any worthwhile achievement be without the aid of close friends? Nowhere! This effort has truly been a labor of deep love, but I could not have accomplished the completion of this book (at least in its current first version phase) without having gained the phenomenal insight of so many mentors and advisors.

To the following individuals and organizations, I offer my heartiest thanks and pledge to put your assistance to work in making this the most beneficial book it possibly can be:

First and foremost, I acknowledge the constant support of my family. My wife, Kathy, is the ever-stalwart encourager when I attempt to do anything to help others. But, when I try to use my talents to help friends in the field of instructional technology, she becomes even more aggressive an encourager. She pushes me, prods me, corrects me, helps me to see things afresh, but always does so in a way that boosts me to higher levels of achievement. I am so thankful that my childhood sweetheart continues to be my very best friend and my wife!

My son, Chad, has listened to my rants and ravings for many years, always steering me back onto the track that is closest to my core beliefs. When I've had hair-brained ideas, he was ever ready to remind me to ponder everything in reflection of what I say I believe in. He is an amazing musician, graphic artist, designer, and visual imagineer. I thank Chad for creating some of the wonderful artwork and design elements that have appeared on NCTP materials in the past. And, I hope that if he ever reads these words, he will feel guilty because he hasn't done more...and he'll get busy right then creating new stuff for me to share with you!! ☺

Reviewers: Goodness! Where would I be now without the help of my magnificent team of reviewers? Collectively, they have devoted hundreds of hours to making this the best book possible on this subject. They have questioned, suggested, modified, and amplified my materials so the true meaning would come through for the site-based practitioner. This group has served gladly as a wonderful editorial board, keeping my shoulder to the wheel and my finger on the pulse of what is really happening in America's schools. Because of them, the **Survivor's Guide** has a user-centric focus—and that, in my opinion, gives this book great credibility: the element necessary to ensure that it is truly useful!

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Dr. James Yao, Professor, Montclair State University, Montclair, NJ

Finally, to all of you who have contributed to NCTP in the past, attended workshops or keynotes or sessions I have been privileged to lead, or worked alongside me in helping schools around the world, I offer my deepest thanks. Each of you has made a significant contribution that was powerful in itself, but when it's combined with efforts of all the others, it's mind-boggling.



Dedication

In memory of

Bruce "Chip" Daley

Administrative Assistant for Technology
Clark County Schools, Las Vegas, NV

Chip Daley was a special friend of mine. He was a dear and true friend to thousands of others, as well. Anybody who had ever been around this man claimed, "Chip and I are best friends." What a legacy!

Chip died on May 15, 2003, after a long battle with multiple medical problems. Only those closest to Chip knew anything at all about his condition; even fewer realized the actual severity of those problems. He just was not the kind to complain; rather, he was one who offered solace to others who were experiencing difficulty.

He was the very first person to offer help to me as I was getting NCTP cranked up. In those days (1992), hardly anybody was saving their technology plans as electronic documents to be uploaded/downloaded via the Internet. Our methods of sharing, too, were quite archaic by today's measure. As I collected paper-based technology plans and wanted to transform them into a file that could be shared electronically, I realized that it was taking far too long to scan each page of each technology plan, then go back and edit those OCR-scanned files so that I could make them available via anonymous FTP (now, that really dates us, doesn't it? Even in those days, we didn't have Gopher being used in a widespread fashion, let alone the convenience of modern, current methodologies). So, I put out a plea for help on one of the online discussion groups. All I wanted was somebody who would take the scanned files, edit them, then upload the files back to us so we could distribute them online.

Chip was the first person to step forward and make that commitment. He converted many technology plan files that helped thousands of schools get their early start in preparing healthy plans. Chip and I conversed often. We became fast friends.

Over the years, he endeared himself to my family, as well. It is that part of his friendship that I appreciate most. He was such a witty person. Many of you were able to be around Chip as he told the story of how he first met my wife, Kathy. He loved to tell that tale, laughing raucously throughout the telling. We were at NECC (National Educational Computing Conference) '94 in Boston. A few computers had been set up so people could check their email. It was in the evening, so few attendees were there. I logged on and began checking my mail. Kathy waited patiently off to one side. A big sign had been erected that reminded users to limit their online time to 10 minutes, maximum.

I did not know that Chip had come up behind me, forming what would have become a line, had there been other people to come along and use the computers. Mind you, there were plenty of vacant computers, but he just walked up behind me and stood there, waiting for me to finish my tasks. Well, I didn't see him, so I just went merrily about my business, not getting in any hurry whatever. Chip shifted his weight from one leg to the other, and gave the impression that he was becoming quite impatient with me. He didn't know that Kathy was the lady standing over to one side, watching me; however, he made a guess that it had to be her. She really began giving me a hard time about getting off that computer, because "people are waiting!"

Several minutes went by, then almost in disgust, I turned around to tell that person behind me that there were plenty of perfectly good computers he could use. When I saw who it was, he just yelled with laughter and we embraced! Kathy couldn't figure it out until she heard me say the word, "Chip!"

We have laughed many, many times about that evening...and the many hours of fun we had together in Boston. Then, each year, when NECC time would roll around, Kathy would travel with me to the conference for one single purpose: to see Chip! We grew to be such extremely close friends.

I have a special memory of NECC in Chicago. Chip had grown up in Chicago, so he knew it like the back of his hand. He had spent his early years in a monastery there and had many stories to tell of those days. Some were funny; some were so heartwarming that it would turn you into a puddle of tears. On the Sunday prior to the conference opening, I had to conduct a full-day workshop. So, Chip asked Kathy if she would spend Sunday afternoon with him. She was thrilled to do so, especially when he told her that they were going to attend church at the monastery where he had spent so much of his boyhood. They did go to the church and its school, then toured many of the private spots that Chip had not shared with anybody else.

My words cannot express how much I appreciate that special gift he gave me by sharing such private moments with Kathy. He wasn't kin to us by ordinary measures, but I surely considered him to be a close brother because of the intense love he shared so unselfishly with us.

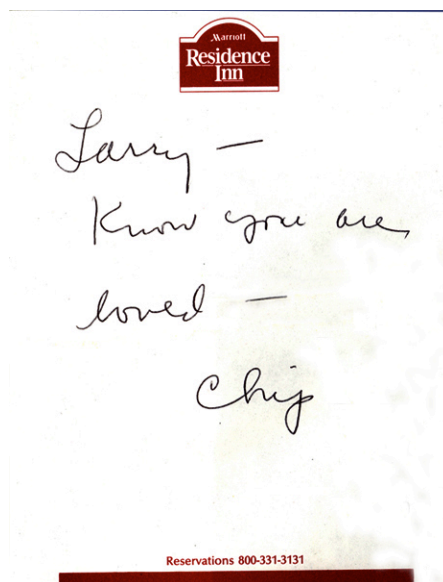
Then, there was the capstone experience!

I had been invited to speak for the National School Boards Association in Scottsdale, AZ. Chip had such a keen ability to discern people's special needs, their innermost feelings, and their trepidations in new experiences. He knew that he could find a way to ease their anxiety at particular times, as well. Once he told me a story about this unique way of showing someone that you really care, that you know they are in need, that there is a salve that can be found to place upon their wounded soul. "All is takes," Chip would say, "is a glass of water."

Several times, when I would be somewhere with him at a meeting, he would sense that somebody needed a “lift,” so he would get a glass of water and offer it to them. It’s simply amazing how that would calm the person almost immediately.

I had told Chip that I would be in Scottsdale and would be speaking to the school board members from across the United States. At one time, he had taught elementary school in Kingman, AZ (and many of you reading this know some of his hilarious stories about those days when he “taught first” -- his way of expressing “first grade”), so was excited that I would get to see a state that he loved so much. So, the time came for me to begin my presentation to the group.

Just as I began, a person from the crowd passed me a note. Here is a picture of that note (which I still carry in my personal journal):



As you might imagine, I was stunned! You see, I was already in front of the crowd, had just begun my speech, so I had their attention, then this note was handed to me. I had seen Chip’s handwriting often, so I knew immediately that it was his note. But, how on earth had he gotten that note to me? How did he know to have it given to me right at this moment? Yes, I knew he cared very much and he was aware that I was speaking, but he didn’t know the exact time.

My mind was whirling! Suddenly, I remembered that an employee of the Clark County, NV School District was attending that meeting. He hadn’t handed me the note, though. I looked over at him so I could figure out if he had been the one who had hand-carried that note to me from Chip, as a means of encouragement. That’s just what it **had** to be! He was smiling, but he shook his head to say, “No. It was not I.” Mercy! I was so bumfuzzled!

Suddenly, the doors at the rear of the auditorium opened. It was a very bright, sunny day outside in Scottsdale, so I couldn't see anything but the form of a person coming through the door. I could see absolutely no facial features or anything else about that person—it was just a regular silhouette. Even that fact, though, didn't tip me off. I knew people would often slip into the rear of the room after a presentation had begun.

This was differently, though. That person just kept walking, getting closer and closer to the front of the room. He passed row after row of people attending. He was going to come all the way to the front of the room! Suddenly, my focus turned to him, because I came to realize that he was just coming right on up there with me. So, I shifted my focus and fixed my gaze upon him.

Here was a wonderful friend, walking up to me, carrying a glass of water! It was Chip! He had “cashed in” some of his frequent flyer miles and had flown from Las Vegas down to Scottsdale just to show his support! What a dear friend! Of course, he and I then told that story of the glass of water to the entire crowd assembled...and it's funny: I don't remember one single thing about my presentation that day. I do remember, though, the impact his coming had upon the whole crowd of school board members.

The stories of Bruce “Chip” Daley could go on and on for hours. His friends were legion. His impact was immeasurable. Yet, he never sought any kind of fame, attention, or recognition. He almost shunned it. He was much more comfortable seeing others in the spotlight. But, when you got to know Chip better, you would find out that he had some of the most famous people in the world for friends. But, he kept those friendships private because he didn't want to destroy the special nature of their acquaintance. What a testimony!

So, Chip told me many times that I should write a book. He knew I had capacity to help others, and he told me that “thousands are waiting, Larry, for your words of encouragement and enlightenment.” Chip always told me I had special gifts and “a way with people,” so I should give to the people I love so much by creating something that will help them.

The single most compelling advice he left with me as encouragement to write this book to you, my friends, was:

“If you want God to bless your work, you have to do something for Him to bless!”

So, now you know why I just **had** to write this book. As I have worked many hours late and night and often into the “wee hours” of the morning, I have felt Chip's presence with me, prodding me and advising me to help those school leaders whom I love and appreciate so much.

So, this book is an offering of love from Chip and me...to you!

1.0 INTRODUCTION

- Audit is a good thing.
- Real leaders **WANT** an audit!
- Audit reveals primarily areas of strength.
- Audit is feared only by those who have something to hide.
- Audit promotes growth.
- Audit demonstrates accountability.

The principles listed above are true! At first glance, though, many of us might not believe those statements. Further, without devoting sufficient thought to the matter, we might even be strong verbal opponents of the concept. A technology audit has more positive aspects, potentially, than negative—it's all in how we look at the matter.

One natural human reaction to a question such as “What is an audit?” is to enumerate the things that an audit is NOT. Perhaps our societal concept of a tax audit overshadows and unnecessarily skews our understanding of what an audit really is and can be.



My dear friend, Dr. Mark Benno (Educational Development Executive with Apple Computer), who is known by many of his friends as *Learning Evangelist*, made the following comment when asked to describe a technology audit:

*...after learning about technology integration and planning [with] you...I know one thing is true. It is not about the technology. It is about people and what you do to **build** people. And ultimately, it is about putting in far more than you expect to get out and then realize that you got out far more than you put in.*

I just **love** that! Mark emphasizes *people* and *personal benefits*. So, an audit allows us the opportunity to re-assess (or, maybe, assess for the first

time) our real reasons for using technologies in the learning and administration enterprises. I feel a certain comfort in knowing that we, as an “academy of professionals” are embarking, through this book and the activities that result, upon a journey leading everyone to a higher plane of performance and results.

An audit is merely a “checkup.” All of us go to our family doctor to receive a “physical audit.” We take our cars to a mechanic in order to obtain a mechanical audit. Some of us even hire a golf pro to give us an audit on our golf swing or putt. So, from these few simple examples, we can see that audits are not bad things. As a matter of fact we use them in a quite natural way to help us improve in various areas of our lives. Audits, then, can, by their design, become quite helpful in enhancing the various lifestyles we hold so dear.

Such is the case, as well, with an audit of our technology-related conditions. As we gather more and more techno-devices around us, we recognize the need to ensure that they are all accounted for, are working properly, and are being employed for proper purposes—purposes that advance the cause for our organizations. A technology audit, then, exists at its very core as an activity that focuses our full attention upon *improvement*—real, sustainable improvement.

As a matter of fact, an audit *can* be a very positive beginning to effective planning for technology. Knowing clearly where one is is critical to knowing where to go next, where the “holes” in the system or processes are, and where your successes are. With information from the audit, your

school is armed with the things you need to know in order to assure the highest caliber, success-oriented, implementation-sure technology plan imaginable! How exciting!



Dr. Terrie Gray, a highly respected consultant, author, speaker, and teacher in Paradise, CA, gave me some excellent insight as I was preparing this manuscript. I always cherish Terrie's words, as they provide a perpetual stimulus for me to think at a much higher plane. Dr. Gray understands quite well the keen importance of an authentic technology plan and its role in a school's success. She knows that student learning extends far beyond the ordinary standardized tests that are used so often as a sole measure of student achievement: she pushes for us in this profession to seek strategies that expand our understanding about ways that students can grow into more productive citizens as a result of the carefully planned instructional activities that frame students' experiences.

When questioned about the role of a technology audit in the overall learning landscape within a school, Dr. Gray offered these incisive thoughts:

With the current emphasis on accountability, making the case to support not only audits, but educational technology generally, needs to be done in terms that are recognized as valid. In other words, we need to craft and implement a technology plan built on a foundation of objectives that target student achievement as well as return on investment. Then the audit can test whether or not the desired ends have been achieved.

So, in pondering those stellar words from Dr. Gray, I built the following diagram in an effort to show, visually, what I interpreted her saying:

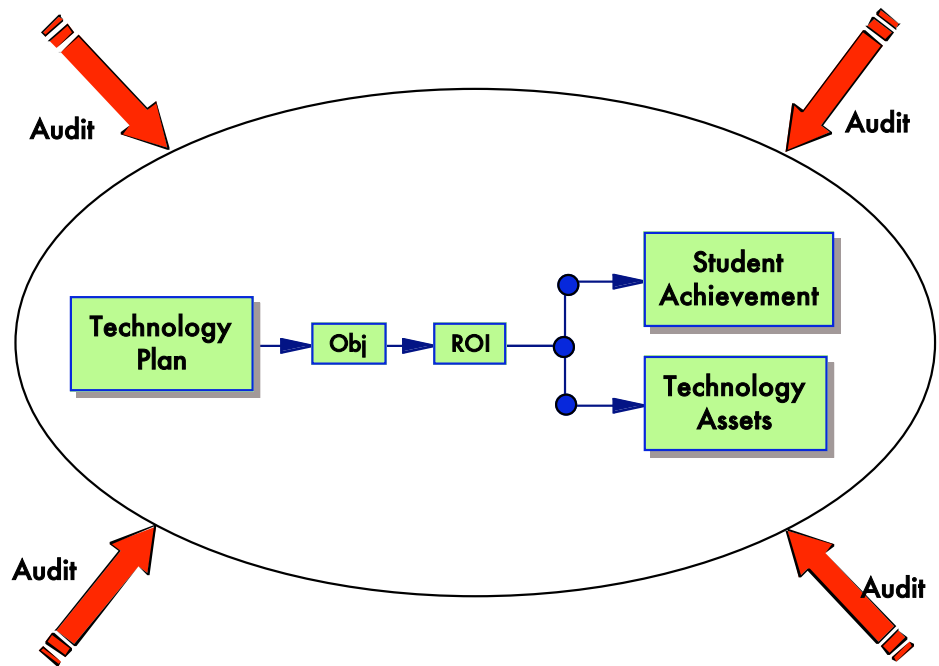


Figure 1.1 Technology Plan/Audit Interaction Model

This model shows the importance of return on investment (ROI) in terms of both the “learning profit” (student achievement) and the “techno-stuff profit” (technology assets) if we desired to focus on only those two elements emerging from the technology plan. Notice that the technology plan sets up the objectives that feed into, or *target*, achievement and the technology assets that support the achievement environment. The technology audit activity, then, examines these interactions.

A case can be made for the fact that *student achievement* is only one of several measures of the success of a technology plan. *Return on investment* is essential, but some might propose that student achievement

is the only “return” that really matters. For the sake of simplicity (and a broadened understanding, by the way), though, let’s look at just two elements: student achievement and technology assets. Let me explain a bit about how I see those two elements in this particular model.

Student achievement can be thought of in terms of learning outcomes—the *results* harvested from a meaningful instructional path. Let’s remember, now, that we are talking about much more than standardized tests. We include Problem-Based Learning (PBL), higher-order thinking, creative arts development, and a host of other ways students express their learning achievements. These outcomes can be measured in qualitative, as well as quantitative, terms. Regardless, careful attention to the assessment and measurement techniques will yield extremely beneficial data to aid in the decisions that are made by using these results. This is the “learning profit” part of the equation.

Technology assets can be thought of as the “techno-stuff.” I realize that this is not a uniform condition extending across all situations. For the discussion of this model, though, we will categorize “techno-stuff” as investments in various technologies: hardware, software, infrastructure, facilities, support, etc. All these are certainly necessary for optimum student achievement and we recognize that the technology assets are required for optimum administrative and other uses in the school. At this point, however, we shall focus upon student learning outcomes. Further, these technology assets may serve their best function when they work so well that they become almost transparent—that is, the students and

teachers don't even think about their being there. They just "work" to support the objectives emanating from the technology plan.

Now, the technology audit can examine not only the interactions among these elements, but also the cascade of outcomes that result from effective interactions. Perhaps another graphic would show this more clearly.

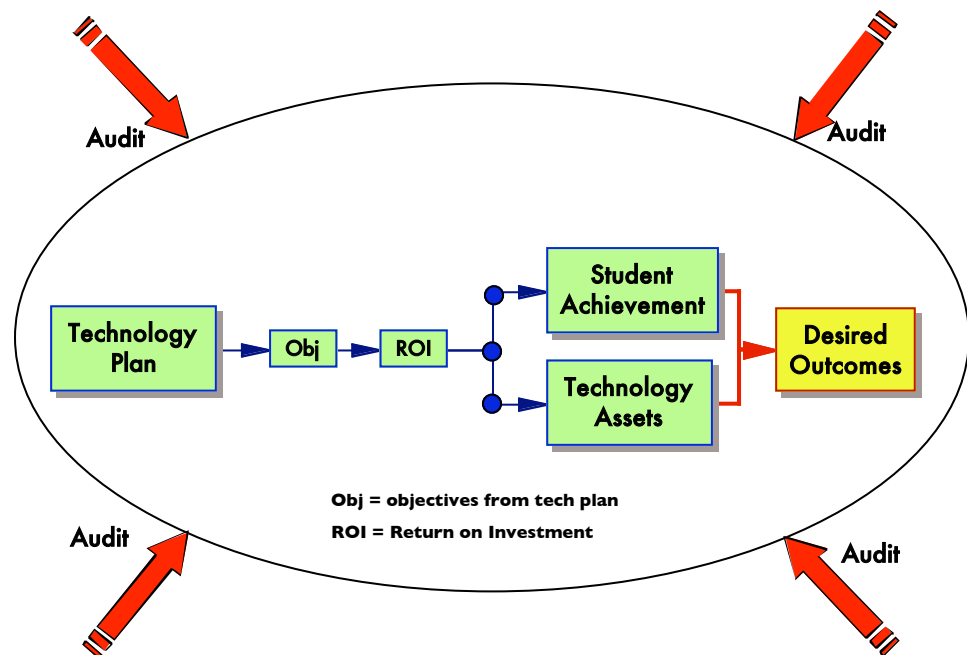


Figure 1.2 System Outcomes Audit Model

An ideal scenario is that we have a well-crafted technology plan, yielding excellent objectives that the school community will strive to accomplish, followed by attention to the return on investment we can expect. We will target the impact of the investments in terms of student achievement and the technological "trappings" required to give positive results in learning.

Finally, our audit will examine carefully the learning outcomes that emerge as the school's efforts on student achievement are supported by the technology assets owned or used by the school.

When we couch the audit in this fashion, we are “killing several birds with one stone.” Whether the results of the technology audit please us or not, we will achieve growth by adhering to this kind of model.

Why would an audit (of any kind) be feared? Why would it be undesirable? Is an audit a “zero-sums” game? If so, who stands to win and who stands to lose? Conversely, is it possible to consider an audit (conducted effectively) as a natural win-win situation?

Without question, most people in our society would immediately classify an audit as a negative, time-consuming, irritating exercise imposed upon us by some external agency that does not at all have our best interests at heart. The main place we see this philosophy is with an oft-dreaded Internal Revenue Service (IRS) audit of our private, home accounts.

Rather than “finding fault” via an audit, the desired purpose is to strive for excellence. Schools that do well in an audit are ones that are stretching to attain a “Seal of Approval” that denotes their excellence in key area addressed through the audit.

Just imagine—what if every technology-using school were so intensely focused on excellence that they strived for a Malcolm Baldrige-type

award—an easily recognizable denotation that they had achieved in the top 1% of schools in the nation? Isn't it exciting to just think about all the positive energy that would be unleashed upon our schools?



Kathy Shirley, Technology and Media Services Coordinator for the Escondido Union Elementary School District in Escondido (near San Diego), California emphasizes the importance of a good attitude regarding technology audits. In spite of the difficulties that might come with navigating an audit experience, maintaining a positive attitude may be the key to success, especially as local educators work arduously in locating, assembling, interpreting, and reporting the variety of information necessary for showing how well the school is providing for the learning needs of students. Ms. Shirley encourages us to consider this positive attitude as a “real plus”—a major benefit that accrues from the audit experience.

For those who are not familiar with the way an audit works, perhaps the process with which educators can most readily associate is the periodic accreditation process. In a similar fashion, there is work to be accomplished before, during, and after an onsite visit.

This *Survivor's Guide* reveals the key principles associated with a comprehensive¹ technology audit. It is designed to be a significant aid to individuals and organizations facing the oft-overwhelming task of documenting the extent of their accountability (AKA “success”), including via the medium of a technology audit. Additionally, the reader is provided a clear view understanding of the importance of an audit, the extent of people's involvement in the audit, the benefits of a technology audit, the roles and responsibilities of those involved, and how all this leads to meaningful improvement of educational organizations—the *real reason* for the audit process.

Technology audits—at least those proposed by the National Center for Technology Planning (NCTP)—are of two basic types and at least two levels. Audit *types* are: internal and external. Audit *levels* are classified as Level I and Level II. There are instances, however, when a third level—Level III—is appropriate. This *Survivor's Guide* explains types and levels, accompanied by examples designed to facilitate the reader's understanding.

Target audiences for the *Survivor's Guide* include: school boards; superintendents; principals; technology coordinators/directors; and classroom teachers. I feel that is incumbent upon all these parties to work

¹ A **comprehensive audit** covers the gamut of issues in which technology impacts daily operations of an institution. Many technology audits being conducted currently in schools cover only a limited scope of considerations, usually those considerations proposed by the auditors, themselves. Thus, the schools wind up paying a premium price for external consultants to conduct a cursory study that yields only marginally beneficial information. The *comprehensive* audit proposed by NCTP has two elements: rudimentary components that are relatively uniform across schools; and specially tailored components crafted to address matters pertinent to the particular school being audited.

collaboratively, in a true team fashion, in order to accomplish the positive goals that are possible as a result of *surviving a technology audit*—and improving significantly in the process!

It is my purpose, by preparing this ***Survivor's Guide***, that each of you who uses it will discover renewed success and a fresh commitment to accountability. Further, I dream that many of you will develop new and creative ways of demonstrating excellence—and that you will share your creations with our colleagues.

For all those who have asked, I will be releasing a subsequent technology audit guide that is developed and targeted, specifically, for other communities that support local educational efforts: medical; business/corporate; military; agricultural; governmental (city, regional, federal, international); and public service (libraries, etc.). My sincere hope is that I will receive sufficient feedback from many of you so that future revisions/versions of this guide will have an even more beneficial impact.

Now, let's get this audit started!!

A handwritten signature in black ink that reads "Larry Anderson". The signature is written in a cursive, flowing style.

2.0 WHO WANTS AN AUDIT, ANYWAY?



The mere mention of this word evokes great fear in the minds of those who hear it. Maybe it makes you break out in a sweat. Perhaps it makes you shake with fear. Or, it could be that you merely attempt to ignore completely the notion of an audit.

Regardless of people's reactions, an audit is often unavoidable—in one aspect or another. Actually, rather than dreading the audit, we should contemplate exactly what an audit is. Yes, it may cause us to prepare for it in a way that is a detour from our ordinary routine. Yet, an authentic audit has the potential to yield numerous benefits—benefits that, if applied appropriately to our situation, will bring about improvement. I contend, therefore, that we should crave an audit! A good audit may be like good medicine: it doesn't necessarily taste good going down, but it's necessary to make us well.

Have you ever been audited? Sure, you have!

As a part of our personal lives, we experience multiple examples of an audit: the piano recital; the baseball game (show me the results of your

many hours of practice in the batting cage); a visit to the dentist (how have you been doing with brushing and flossing your teeth?); an opportunity to introduce one friend to another (can you remember the names of both friends, their occupation, and other pertinent facts that you have been told many times?); and that dreaded trip to the bathroom scales right after a big holiday season.

See? We all are participants in audits. We fear some. We just understand that some are part of normal life. Regardless, those audits in which we see opportunities for improvement are the ones where we realize, even at a subconscious, academic level, that the *outcome* of the audit will enhance our lives.

Legislative Mandates

Most school districts in the United States now have written technology plans. Just a few years ago, most of them did not. Why? Nobody *required* schools to have written plans.

The tables turned, though, in the mid-1990s, when the U.S. Congress passed an important piece of legislation that, among other things, required the establishment of a national technology plan in the U.S. Department of Education. Shortly thereafter, the E-Rate program came into being. Meanwhile, Congress passed other laws that were designed to strengthen schools' use of technology.

Within a short period of time, members of Congress became curious about the extent to which the release of these federal dollars was impacting

instruction and learning. So, for schools to participate in multiple Federal programs (Goals 2000, etc.) and to receive E-Rate discounts, a specific prerequisite to receiving funds was inserted into the legislation.

This prerequisite that swept the entire country was in the form of a written, locally developed, school board-approved technology plan. Most often, the distribution of Federal and/or State funds for technology integration was frozen until the district's technology plan was submitted to a designated superior agency.

The concept of a technology plan is no longer a vague or hypothetical notion, at least not in theory. One potential flaw, though, in the governments' exercises to get schools to plan well was that very little uniformity in technology plan content across the nation was suggested. Thus, if you were to read six technology plans from six different schools, you likely would find six totally different formats for these plans.

I am not suggesting a "cookie cutter" approach to planning. Not at all! Those who know me well know that I am vehemently opposed to this sterile notion. On the other hand, though, one major effort by the National Center for Technology Planning has been to provide schools with intellectual frameworks that would guide their planning efforts so that, as you would read these diverse plans, you would recognize a uniformity in the way the plans laid out the philosophies, policies, and practices of the schools. NCTP has offered numerous aids that schools could use that would allow them to: 1) meet the guidelines imposed by the

superior agencies; and, more importantly, 2) demonstrate clearly their own autonomy, showing how the plan is relevant to **their** needs.

Currently, we see a phenomenon almost parallel to the helter-skelter method of technology planning back in the early 1990s. A few schools in the U.S. have engaged in technology audits; however, there is absolutely **no** rhyme or reason to these audits, particularly as you might compare the audit in one school district to the audit in another.

Several groups of consultants have offered technology auditing services, along with a bare handful of technology vendors. They might even propose their own “twist” to the audit process. It doesn’t take us observers very long to realize that technology auditing, as a growing national activity, needs to have some of the “shaping” performed in a fashion similar to the way technology planning was shaped during the late 1990s and into the 21st Century.

NCTP was the predominant player in helping to get technology planning organized so that it could become a truly meaningful enterprise beginning back in the 1990s. Similarly, NCTP is forging ahead again to help shape technology auditing philosophies, policies, practices, and eventually enabling legislation both in the United States, as well as in other countries of the world.

Questions such as “How well is our technology dollar being spent?” “What is our ROI (Return On Investment) regarding instructional technologies?” “Where is the evidence to show that students really are learning with the

technologies we have bought for them?” and “When our schools purchase technology tools, are they doing so in an informal, random fashion or are they following a well thought out plan?” are legitimate questions that we, as custodians of the education trust, should be prepared to answer swiftly, accurately, and gladly. Well, if we are to position ourselves to address these and other equally important questions, what mechanism can we use to aid us in this effort?

Technology audits, then, became quite important as a means of formalizing evaluation strategies. They are important to the professional educators, to the community, and to the students who are customers of the educational system. With a sound strategy for auditing in mind, we become much more comfortable knowing that now we can demonstrate our *accountability* more easily.

Accountability

One word that is closely associated with audit is “accountability.” As a society, we desire accountability. After all, we expect those individuals charged with responsibility for handling public funds to be accountable for the wise, efficient use of resources with which they have been trusted.

As we participate in various organizations, we hold a “normal” expectation that the “books” will be audited on a regular basis. Part of our “ordinary” expectation for this audit is that a person or persons external to the organization will conduct it. Somehow, the external nature of an audit lends a degree of credibility and authenticity that cannot be achieved readily if the audit were conducted from within.

tiered audits, the school will take significant, positive steps toward improvement. *Improvement*, after all, is the central purpose of any audit.

6.1 Level I

It has been said that "A trip of a thousand miles begins with a single step." Certainly, this holds truth where the audit of technology implementation is involved. Perhaps the best way to introduce the notion of a Level I audit is to set up a scenario of a school district and follow the actions of this district into and through a technology audit.

SMALLWOOD SCHOOL DISTRICT

INITIAL AUDIT PROCESS

Smallwood School District represents approximately 28,000 residents living in a community that has a strong industrial and agricultural history. Many of the town's residents work in the local factories. A growing number of residents have established their own small businesses, including home-based businesses, over the past 15 years. Smallwood demonstrates a strong heritage in the farming and agricultural products areas; however, the number of family farms has dwindled significantly over the same 15-year period. More people are transitioning their farmlands into commercial developments, such as industrial parks or residential subdivisions, especially as families who lived within the city for generations have moved out to the fringe areas and built homes in these blossoming subdivisions.

Smallwood has a new shopping mall that was completed 4 years ago and that has brought a boost to the local economy. Only 35 minutes to the East of Smallwood is a state university, so higher education opportunities are readily available to students who emerge from the local school district. Many employees at the university have established residence in Smallwood due to its charm and strong community spirit.

The student population in Smallwood School District is 3850, grades K-12. Fifty-seven percent (57%) of teachers hold a masters degree or higher. Eight percent (8%) of classroom teachers have earned doctorates. Twenty-two percent (22%) of employees report that they hold a special certification in some aspect of technology.

The district developed a new technology plan in 2001. The intention is to update this plan annually and to have each new plan cover a 3-year span. The plan has not been updated since it was released. Dr. Martin Speights, Superintendent, declared that, prior to initiating the revision phase for the plan, it would be appropriate to have some external entity come into the district and conduct a thorough audit of technology use. Dr. Speights is quick to confess that he doesn't know for sure what this entire audit would cover or measure, but he has the strong sense that this action would be good for the district.

The next step for the district is to meet with the auditors to determine the essential components of a meaningful audit:

what information the district needs to compile; what role(s) each person must play; what beneficial results the district can expect from the audit; the scope of the audit; and the estimated cost.

Dr. Speights and the technology planning team have full expectation that all the things they learn from this initial audit will lead them into a modality of improvement and, further, into a state of readiness for their next audit.

The team understands that the first audit will examine basic level items. Subsequent audits will be either a regular, periodic repeat of the first audit (to document a sustained pattern of implementation) or else a Level II audit that is more thorough and takes more time.

As the team contemplates the forthcoming activity, they are filled with a mixture of consternation and excitement. Consternation because they fear the unknown. Excitement because they have “caught” Dr. Speights’ positivism—and the fact that this district thrives on challenges that make them stretch to become better.

{Now, to step through this process more rapidly, I will use bullets to identify each step/phase of the audit activity.}

Internal audit phase

- Local audit team leaders are chosen (perhaps by Dr. Speights). He may appoint an individual to serve as overall coordinator, as well. The key here is to get the best leadership in place and functioning quickly.
- Audit teams are formed.
- Necessary documents needed to support the audit are gathered (ex: technology plan, facilities plan, personnel reports, etc.)
- Meetings are held at each school to explain this process to teachers. The purpose is to ensure that all teachers know what to expect as their peers begin gathering data from a multitude of locations.
- Dr. Speights meets with the PTA/PTO (Parents Teachers Association) to explain the process, to seek community support and patience, and to forecast some findings. This serves to get the community “on board.”
- Teams work school-by-school within the district.
At the same time, another team works on the district as a whole.
- Individual team reports are written, and then combined into a district-wide document.
- Dr. Speights shares the internal audit report with the school board.
- The school board approves the internal technology audit.
- Dr. Speights authorizes publication of the report.

External audit phase

- An auditor (individual or team) is selected.
The working contract (including salary) is agreed upon, in final form.
- Dr. Speights (and the team, if deemed necessary) meets with the external auditors.
- The local team shares with auditors all documents gathered, as well as the internal audit report.
- Together, the auditors, the local audit team, and Dr. Speights work to establish a strategy that will drive this formal audit.
- All parties agree upon a schedule/timeframe for the audit.
- All parties discuss some possible outcome objectives.
- Auditors schedule date(s) for on-site visit(s).
- Auditors meet with focus groups and other constituencies, as needed.
- Auditors study all documents provided.
- Auditors schedule an on-site visit and make their observations.
- Auditors prepare, then release to Dr. Speights and the team, their written report.
- Auditors meet face-to-face with Dr. Speights and the team to deliver an oral report on the audit.
- Auditors deliver to the school board both a written report and a visual presentation to support their findings and recommendations.
- Auditors volunteer to give their presentation to an open meeting of the community. This is at the discretion of the local school board and administration.

-
- Dr. Speights coordinates the writing of a plan for improvement, addressing issues illuminated in the technology audit report. This plan is submitted to the school board and to the external auditors.
 - When auditors have received, reviewed, and approved the improvement plan, they write a letter to Dr. Speights, the school board, and any super ordinate agency (such as the State Department of Public Instruction) to indicate that the audit was conducted and any revelations that came forth.
-

This scenario represents the most basic form of technology audit. In actual practice, some of the elements can be “tweaked” to suit the best interest of the affected school district.

Some activities in this example may occur in a sequenced manner. Many *could* happen simultaneously. Stellar project management will dictate the better way.

6.I Level I

6.I.I Components

A Level I technology can best lead to success or positive improvement if we gain an understanding of the Level I framework—what it includes, as well as “who needs to do what” in preparing for this formal audit. Numerous components of a Level I technology audit exist. The following are presented as a baseline set of considerations. You may want to add a listing of your own that would include things I have not thought of.

Document inventory

- What sorts of documents must you have compiled in order to demonstrate the breadth and depth of your technology integration efforts?
- Where should these documents be kept?
- Who should be responsible for maintaining the database of documents?
- Should the document "library" be maintained in hard copy or will electronic holdings be acceptable?
- For how long should documents be maintained and catalogued?
- Are the documents sufficiently important that backup copies should be kept at an alternate site?
- How should the documents be indexed?—is there some accepted scheme for indexing, or is this something that is left up to each individual school district?

These and other similar questions face school district personnel. No fear or trepidation is necessary, though, because a Level I audit requires "surface level" documentation. The key point in a Level I audit is to demonstrate that the school has its act together and is making reasonable progress toward achieving future-oriented goals. The aggregation of documents is merely one piece in the metaphorical puzzle.



Document inventory: **Technology Plan**

One of the main documents a school district should have ready for review by auditors is the technology plan. Ideally, this plan will be available for viewing online, as well as in hard copy. Auditors will likely check several elements to assess the practicability of the plan:

- when the plan was written, originally
- whether the plan being used is an original plan or an update of an earlier plan

-
- the makeup of the planning committee (to discover the scope of involvement in developing the plan)
 - whether the essential, focused goals of the district are highlighted clearly and explicitly
 - an authentic evaluation plan
 - evidence that the plan correlates technologies with budgeting/funding, curriculum, and hiring practices
 - evidence that the plan has administrative approval, the proof of which includes signatures from the superintendent, board members, and principals, as appropriate



Document inventory: **Facilities Plan**

Auditors will look to see if the district has a comprehensive, meaningful plan for the use of physical facilities. This plan may include such things as a physical plant layout map; an enumeration of buildings, complete with square footage statistics; a map showing the geographic locations of all buildings; and recent statistics showing the economic impact of heating/cooling and other utilities, as well as budget figures to substantiate that the district is doing its share in building, developing, and maintaining facilities.

Auditors may examine the facilities schematics to discern locations where technologies are deployed, especially such necessary items as wiring closets, server farms, hub/switch/router locations, Point of Demarcation (PoD) for network access, etc. The information provided to auditors may tell them the age of each facility, date(s) of renovation(s), and even plans for

7.0 PHASES OF AN AUDIT

To understand better how a comprehensive, effective technology audit works, we can break the process down into its various phases. As a reminder that may make this entire process easier to comprehend, you may want to draw a comparison between the audit process and the activities associated with school accreditation.

As you know quite well, when time approaches for your accreditation visit to occur, you segment this into three pieces: 1) getting ready; 2) the on-site visit; and 3) results & follow up. You realize that the greatest quantity of work occurs during the first phase.

Such is the situation with a Level II audit. Therefore, we will examine the three phases, accordingly.

7.1 Phase One: Getting Ready (Pre-Audit)

Whether the technology audit has been triggered by an internal desire by the school to assess its accountability or whether the impetus has come from outside the school, the initial phase is the same. The school must get ready for the audit. Thus, this phase is sometimes called the “pre-audit” stage.

At a macro level, the school will want to establish a set of *systems* that can be put in place to make your time more valuable, more efficient. You may

want to form a group of teams to perform specific functions; a physical location may be specified as a “gathering point” for evidentiary documents; a series of focus group meetings may be scheduled so school leaders can poll teachers, students, parents, and community members so they can voice their opinions and give their perspectives regarding the school’s status; and you may create a system where all the hard work of engaged people, the data and reports you collect, and the supporting systems can be perpetuated—so you don’t have the start over each time an audit is called for.

Enrolling team members. To make your technology audit a success, it is essential that you have good teams. Good teams will be made up of good people. The good people on the team will choose good team leaders. Good team leaders will ensure a strong and fluid cooperation among teams, all working on a common end goal.

Team building¹³ is not an inconsequential or insignificant activity. All school leaders realize this fully. Yet, we often get in such a hurry to get a project started so it can be finished, we neglect perhaps one of the most important rules: Get the best leaders who will build and grow the best teams so they will accomplish the best results!

¹³ To locate excellent resource material on team building, NCTP recommends the work of John C. Maxwell (<http://www.maximumimpact.com>). Maxwell has written books and created audiotapes, CDs, and videos that teach others how to be successful in key areas of leadership and team building. His outstanding books include: *The 21 Irrefutable Laws of Leadership*, *Developing the Leader Within You*, *Developing the Leaders Around You*, *Becoming A Person of Influence*, and *The 17 Indisputable Laws of Teamwork*.

Maybe you are a school superintendent and you have just learned that a technology audit will be coming to you during the upcoming school year. What are you to do? Where do you start? Who do you ask? How can you make sure the audit is a positive thing for your school and community.

Perhaps you should consider convening an informal gathering of advisors to help you think through this before you “pull the trigger.” You might call upon a sampling of classroom teachers, school staff, and maybe a few of your central office co-workers. You may want to just “level” with them by telling them that a technology audit is coming and you want to obtain their very best thinking about some strategies that will assure success for the school. At this meeting, assign someone to record copious notes or else have your secretary sit in on the meeting and take notes that can be typed and given to you for your thinking after the meeting has ended.

During this meeting, you might want to engage in a simple brainstorming activity—asking everyone to call out, as fast as they can, all the areas where you use technologies in your school. You might ask them to be frank and candid in their comments, then ask them to pinpoint areas where they perceive that improvements could be made. If/when they mention some examples, ask them for substantiating evidence that may give you clues to other things needing attention.

When you assemble the *very best* people who comprise the *very best* teams, you have a unique opportunity to watch stellar leaders emerge. As these top leaders rise to the top in your organization, you will have developed a tremendous pool of talent that is always at your disposal, ever

ready to aid you in achieving organizational goals. I suggest strongly that you simply consider this as another stage in your pursuit of meaningful school transformation! *Great* leaders achieve *great* results—and that is precisely what you desire.

Try to imagine how the auditors will see things—look at things through their eyes. Imagine that you are an auditor in another school. Pretend that one of the auditors is a very close friend who will share candidly with you all the secrets of the auditors. What would the auditors do? What would they say? What would they seek? How would they interpret what you give them? What would they recommend?

As you and your team of advisors go through these considerations, you will have prepared yourself well for what lies ahead. You will no longer fear the technology audit, nor will you consider it a negative event. Rather, you will see this as a profoundly important opportunity to engage in systemic improvement, as well as great improvement at the individual level.

Bring it on!!

7.2 Phase Two: On-Site Visit

Ah! The time has come finally when auditors arrive at your school and are examining both the reports (data, information, evidence) and the actual reality of technology integration. What can this mean to you and what should you expect during this time?

9.0 DATA COLLECTION & ANALYSIS

A superintendent or technology coordinator might wonder, “If I am going to coordinate a technology audit for our school, how should I proceed with collecting, organizing, analyzing, and interpreting the data that will support our belief that we are using technology effectively? For those of us who have been educators a long time, we know the value of data. An entirely new face has been put on data collection, though, as a result of the Scientifically Based Research (SBR) requirements that are so much a part of the *No Child Left Behind* (NCLB) Act.¹⁵

Much of the data used in a technology audit are on hand already. Others will be collected as a part of the audit. Chances are good, though, that they will be helpful for NCLB data gathering activities. Thus, we have another reason for understanding benefits of a technology audit.

9.1 Data collected by/for auditors

When auditors begin their work with your school, they will need access to several kinds of data so that their perception of the school is both complete and accurate. Since you want to portray the best possible image of your school and community, you will want to study the following sections in

¹⁵ Public Law 107-110 is the official name of the *No Child Left Behind Act of 2002*. It is an act designed to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind. For a full version of the act, go to <http://www.ed.gov/policy/elsec/leg/esea02/index.html>

order to have a head start on the basic kinds of data that are most beneficial in a comprehensive technology audit.

These are presented in no particular sequence, except that the discussion of technology plan comes first. All others follow, but you may decide their order.

9.1 Data collected by/for auditors

9.1.1 Technology Plan

Your technology plan is the nucleus of all things associated with this technology audit. If your plan was prepared correctly, it provides a blueprint for what the auditors will discover as they conduct the audit. It has been pointed out previously here that the very first document that should be of value to both your local audit team and the external auditors is your technology plan. If for no other reason than this, alone, it will behoove local technology planners to create a planning document that facilitates the audit. NCTP has produced some materials (written and spoken) that give schools some excellent guidance in both the format and content of a meaningful technology plan.¹⁶



Critical point: What are the “main things” in your technology plan? What are the 3, 5, 8, 10 (or however many you identify) key elements of your

¹⁶ The *Guidebook for Developing an Effective Instructional Technology Plan* has been used by thousands of schools and organizations around the world as they work through the process of creating a technology plan. After their plan is in place, though, they must consider the steps to follow in revising and updating their plans regularly. This is where the second book, *Visions and Revisions: A Workbook for Updating and Evaluating Your Technology Plan* comes in handy. Both of these books are available as downloadable PDF (Adobe Acrobat™) files from the NCTP web site. An audio program, *Planning for Gold*, is available for purchase directly from NCTP.

technology plan? What do you really plan to achieve during the life of your plan? If someone picked up your technology planning document, would s/he be able to tell, in short order, precisely what your school will do? Are these elements clearly identified? Are they pulled out, perhaps in a bulleted list, so all who read your plan could immediately spot the central focus of your activities? If so, that's great. If not, then you now know an area where you can concentrate efforts that will help you in the long run.

Earlier in this book, you found a reference to the *Technology Audit Accountability Matrix*. On the next page, you will find this form. It is an excellent tool to use when you want to really simplify and sharpen your technology plan. People who have used this matrix have been amazed at how easy it is to finally get a clear idea of what they **really** want and intend to do with their plan. Then, when the focus of the plan is sharpened, the natural by-product is that they can truly audit what they said they were going to do. Oh, that all of life were this simple!

On this form, you will notice that there are three columns, basically. Two additional columns appear to help you record the gathering of ancillary but supportive data. In column one, you will simply record the main, key points of your technology plan, as mentioned in the "Critical point" paragraph. Just list those main goals, items, or objectives in the column labeled, "Action." This is what you plan to **do**.

Column two, labeled "Date," is where you will designate a target date by when you hope to have achieved this action. Concurrent with completing this column, you might want to locate some project management software

Technology Audit Accountability Matrix

Timeframe: AY 2005-2008

Action	Time	DRI	Evidence	Lessons Learned
Broadband network access in each physical plant facility (related to instruction)	March 15, 2005	Evelyn Briscoe, ITA		
Broadband wireless access available 24x7 throughout	December 8, 2005	J. Moreau, LRC		
All personnel have portable computing capability	April 15, 2005	Porter Roberts, Support		
Activity fund operations occur electronically throughout	January 31, 2006	Andy Carvin, Comptroller		
Virtual mentor online program (homework helpers) deployed fully				
Teacher incentives in place for innovative use of technologies				
Technology student government created to aid district in long-range planning.				
District-wide professional development program tailored to teachers' needs				

Figure 9.1 Technology Audit Accountability Matrix

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Note: This matrix portrays hypothetical information only. It is not intended to serve any purpose other than illustration.

10.0 ROLES/RESPONSIBILITIES

In order for your technology audit to be successful, each person or group involved should know his/her/its role. This will help to ensure that the audit goes smoothly. Few things can cause more disruptions than when nobody knows their job in the process, so few things get done and what does get done will probably be done poorly.



Julene Reed, Director of Technology for St. George's Independent Schools in Collierville, Tennessee offered a particularly salient perspective on the importance of all team members learning, accepting, and excelling at their roles:

Recognizing that every person's role in a technology audit (whether it be that of superintendent, principal, board member, teacher, staff member, student, or parent) is one that is valued as essential to enhancing student learning and achievement helps to set the tone for collaboration and communication.

You just can't say it any clearer than that, can you? She reminds us that the purpose of our role fulfillment is to enhance lives of students—and that our school community reaps huge benefits when we excel in our roles.



Critical point: Titles used in the remainder of this section pertain to traditional position titles in U.S. public schools. I realize that this book will be used by people who represent a wide variety of educational organizations around the world. Some of you are in private, independent, Christian, or parochial schools. In those cases, you may use a different vocabulary for the leadership positions. This is important to you. So, as you move through these next sections, just make the mental transition from the nomenclature you see here to the nomenclature with which you are comfortable and familiar.

In this section, we will examine each person (or group) involved in the audit and point out some of the expectations that we can reasonably place on him/her/them.

Superintendent

We all know that the superintendent is the chief academic officer in a school. Therefore, s/he has ultimate responsibility for the entire learning program—from the students to the teachers to the supplies to the buildings to the ... well, you get the point. I suppose we could just say that the superintendent is responsible for it all!

In the event that you are the superintendent, you may feel overwhelmed when you read this document. Do **not** feel that way, though. There is tremendous satisfaction in knowing that you provide keen, effective leadership for a group of dedicated cadre who are striving diligently to improve the conditions of each learner in their care.

When this technology audit comes along, the superintendent has the unique opportunity to provide positive, motivating leadership for all people in the school community (students, teachers, staff, parents, business partners, community members, and other constituents). We have heard the famous comment, “The buck stops here.” Well, NCTP contends that we can alter that a bit to read, “The buck **starts** here!” Leadership **starts** with the superintendent!

A few of the ordinary expectations of the superintendent during an audit are:

- **Share responsibility**—but not *ultimate* responsibility. That belongs to the superintendent and cannot be relinquished.
- **Organize local audit team** — This can and should be performed in concert with the Technology Director. In very short order, your local team will have been formed, representatives from all across the district will be among the members, a team leader will have been chosen, and the requisite tasks will have been enumerated and assigned for accomplishment.
- **Provide support** — You will want to ensure all those around you who are working on the audit—the local audit team, your fellow administrators, and school staff—that you won’t get in their way but that you offer support to them during their efforts. You may occasionally want to call an early morning meeting of the local team so you can glean their temporary or partial feedback—and you’ll buy their breakfast! Small evidences of support—repeated as needed—will result in amazing results. One of the by-products will be enhanced loyalty.
- **Select the external auditors** — In some cases, the superintendent will be allowed to select external auditors. Sometimes, though, an external agency (SEA, Federal government, etc.) will simply notify a district that an audit is forthcoming. In that case, the auditors will probably be chosen for the district already.

If the superintendent chooses auditors, s/he *must* remember that the auditors chosen should be as objective and as honest as possible. If auditors are tempted to “go easy” on the district, then

the district is getting cheated. You want to get a true picture of how well you are measuring up to the highest standards possible. Choose your auditors carefully! (Refer to the section “Choosing an auditor” later in this book—Chapter II.)

- **Coordinate auditors’ visit(s)** — The superintendent will have many opportunities to interact with external auditors before they arrive on campus. However, when the site visit occurs, it is the responsibility of the superintendent to initialize, orchestrate, and coordinate auditors’ visit. Now, to take some of the pressure of the superintendent, it should go without saying that s/he doesn’t actually have to perform all the functions related to the visit. The magic word is: DELEGATE!

The superintendent has a terrific opportunity to tailor conditions surrounding the on-site visit, so s/he should jump into this situation with both feet and really create a magical experience. The good news is that, if the visit is well planned and a guaranteed success, the entire district will profit. All the personnel who have worked so long and hard on the local audit, as well as those who have supported their efforts, will reap the benefits of the superintendent’s “event planning.”

- **Orchestrate auditors’ report** to the school board (and school/community, perhaps)—Upon completion of the formal audit, the auditing team will submit to the school a written summative report. It is the superintendent’s role to work closely with the auditors in getting this report submitted in a timely fashion. This is one of the elements that should be understood early in the negotiation process for selecting an auditor.

In the event that the school desires an oral presentation by the auditor, it will be the superintendent's responsibility to arrange that, as well. Of course, the opportunity for a report to the entire school personnel and/or the community at large may be a possibility, as well. The superintendent will just have to make a judgment call regarding the timeliness and appropriateness of such a report.

- **Finances**—Superintendents have the responsibility to arrange all the funding for the audit, complete from the initial meetings of local teams through the final report and exit of the external auditors. Current conditions in school don't seem to indicate that superintendents would include a technology audit as an item on the school budget each year; however, that situation will change soon.

The superintendent should gather his/her best advisors and determine exactly the scope of a technology audit that will serve their school in the best fashion. Then, they will have the job of associating monetary figures to the activities they desire to complete.

- **Public relations**—Well, PR is certainly no new task for superintendents; therefore, s/he can merely direct some of the existing public relations resources to the technology auditing efforts. Perhaps the superintendent will want to make a series of speeches in the community that describe the nature of their audit. Maybe there will be presentations to civic groups, school advisory panels, and other audiences. Regardless, all these opportunities for public relations are responsibilities of the superintendent.

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- **And other tasks, as assigned**—Part of what comes with the territory in a superintendent's job is all the "other stuff" that has to be done but which was never mentioned as a job function on the original contract. We have chuckled about this notion for years, but it really is true. Since the superintendent is the organizational leader, it is his/her responsibility to ensure that all necessary chores are completed.

Principal

A principal is the instructional leader in a given school building. While she¹⁹ may lead in instruction, she also has responsibility to ensure accountability for all aspects of that school's operation.

Hence, with respect to this technology audit, the principal will fulfill, as a minimum, these roles:

1. **Cheerleader** — First and foremost, the principal should be the main encourager, to demonstrate to the school that this audit will be good for us.
2. **School audit team organizer** — The school needs a team. The team must function at the highest level of efficiency and professionalism. Thus, the school team needs the best leader

¹⁹ Note: I make no attempts to stereotype by gender, but for lack of "going overboard," I shall choose one of the genders, for no particular reason, then use that gender for the examples.

Appendix L. Technology Audit Accountability Matrix

Technology Audit Accountability Matrix

Timeframe: AY 2005-2008

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