Create better working relationships with subject matter experts from all fields.

Sometimes SMEs can cause problems for your instructional design project. But have you done everything you could to understand, communicate with, and involve your SMEs successfully? Learn from the good and the bad examples from Chuck Hodell’s years of experience to help you plan for better ISD-SME relationships.

Praise for This Book

“SMEs From the Ground Up will change the way you think about incorporating experts into your training projects. The book is a practical guidebook for identifying, selecting, working with, evaluating, and above all getting the most from your SMEs. Chuck Hodell’s approach to SMEs will have a big impact on your results.”

Jenn Labin
Author
Real World Training Design

“SMEs play a critical role in instructional design projects, but managing this important relationship is not always easy. Dr. Hodell’s book offers a comprehensive and well-defined approach for building and maintaining a productive relationship with your SMEs. It provides insight into how to work with this important partner no matter your level of experience with the topic at hand.”

Maura Walden
Director of Corporate Training & Organization Development
Johns Hopkins Healthcare LLC

“SMEs From the Ground Up is an excellent resource for novice instructional designers and seasoned training project managers alike! In this very readable book, Dr. Hodell gives a systematic approach for creating and sustaining mutually rewarding partnerships with SMEs of all types. Hodell’s concise style provides actionable suggestions for fully incorporating SMEs into the ISD team.”

Deborah Petska
Director of Workplace Learning
Danya International, LLC
"Effectively partnering with subject matter experts in instructional design projects is one of the critical skills a designer must develop. Yet most instructional design training programs place far less emphasis on this competency than they do on issues like objective writing, the ADDIE model, adult learning, and other ISD concepts. Dr. Hodell takes a methodical approach in defining and developing the various SME relationships and successfully incorporating them into the ISD process. As with all of Dr. Hodell’s books, this provides tools and specific processes that are immediately useful. The discussion question/case study construct at the end of each chapter is something we will use for our ongoing training of staff development."

Todd Brace
Director of Corporate Learning
Medifast

"Dr. Chuck Hodell strikes gold again! Recognizing the critically important role of subject matter experts (SMEs) in today’s increasingly complex training and instructional design field, Dr. Hodell provides a highly practical resource. A veritable buffet of goodies, this text begins with an introductory chapter on the types and roles of SMEs. Subsequent chapters tackle important topics such as managing SMEs, introducing SMEs to instructional design, and more advanced topics such as evaluating the performance of an SME and solving common problems that may arise. The last chapter is a gem all by itself—a robust discussion of what to do, and not to do when working with SMEs. As promised by the title, this text provides a “no-nonsense approach” to partnering with SMEs. A must for the bookshelf of every instructional designer!"

Dr. Mary Lynn McPherson
Professor and Vice Chair for Education
University of Maryland School of Pharmacy

"In today’s fast-paced, digital age society where face-to-face and online collaborations grow increasingly challenging and diverse, Hodell once again presents a practical and much needed guide for instructional designers. Trainers, designers, and subject matter experts will all benefit from Hodell’s expert advice and proven strategies that lead to efficient and successful partnerships between professionals."

Erica C. Boling, PhD
Associate Professor
Rutgers, The State University of New Jersey
SMEs
From the Ground Up
A No-Nonsense Approach to Trainer-Expert Collaboration
Chuck Hodell
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Introduction

The roles of trainer and instructional designer have never been more diverse and challenging than today. The demands placed on ISD professionals mirror the changes taking place across every inch of the learning landscape, from social media and new technologies, to more efficient work practices and procedures.

From nonprofits to multinationals, the emphasis on training has grown exponentially as organizations realize that investments in the training function represent the most efficient and cost-effective avenue for maintaining and expanding skills, updating and supporting new products and services, and providing the mandated training required in today’s regulatory environment. Instructional design is suddenly “new” again, and with it comes the attention to best practice and efficiency that only a systems approach to training can provide.

As the need for training has grown, so has the need for an expanded family of professionals required to design and implement training. At no time in the past has the role of subject matter experts (SMEs) been more important, or grown so rapidly. SMEs are the heart of many instructional design projects, and trainers have struggled for years to find the best way to incorporate this highly talented group of professionals into the design family.

As a college professor, students are as likely to ask me about how to work with SMEs as they are to ask about how to write great objectives or design online learning. There seems to be a real vacuum of best practices and approaches to working with SMEs. Since instructional design and training now thrive on getting content correct, there is no realistic way to do this efficiently and productively without finding the best way to work with SMEs.
I started in training as a subject matter expert, and outside of my roles in training and instructional design, I still serve as an SME in some content areas. I am guessing the same is true for most of you. The world of traditional training responsibilities and the important role that SMEs hold are not mutually exclusive. They in fact thrive when working together.

My early experiences with SMEs as an instructional designer and project manager were both challenging and rewarding. I remember the first time I hired one of my former college professors as a content expert, and had to manage that relationship with all its inherent awkwardness. There was also the time I was given a month's notice that I was going to manage a massive skilled-trades design project that was to start with five committees of SMEs, all arriving on the same day to work on five different content areas. We started that project with 30 SMEs, five instructional designers, and a flipchart. Several years later, the group of training modules was well beyond 250 designed and implemented internationally.

I survived these and hundreds of other similar challenges because I quickly learned that a talented content expert could be just as rich an asset as the best instructional designer or facilitator. Every aspect of your relationship with SMEs is just as important as every other project-related relationship you have, and there shouldn't be any value system that suggests any of these elements is more important than another. And, that's the point. The magic in working with SMEs is as much common sense and relationship-building as it is any other skills. I have never felt more challenged or worked harder than the times I was bringing a design project to fruition shoulder to shoulder with the best and brightest in a given content area and a team of first-class trainers and designers.

As a result of those years of experience and the assistance and guidance of thousands of SMEs and talented instructional designers, I offer you some insights into what I have learned the hard way. I have also asked a select group of SMEs and designers their thoughts on this relationship, and their ideas appear in every chapter of this volume.

Hopefully with this book you will learn how to work most efficiently with SMEs and how to nurture training and design skills within SMEs to the mutual benefit of both groups. Many trainers were first SMEs, and it isn't much of a leap for motivated, smart SMEs to become key players in the design and implementation of courses.

No matter your level of experience in training at this point, this book will provide the basics of building a productive working relationship with SMEs, and it will also
offer hundreds of tips on building great courses by incorporating the talents of SMEs in the course design process itself. Not only can you benefit from the subject matter knowledge they bring to the process, you can also move SMEs toward the training and instructional design side of the equation in ways that benefit all aspects of the process.

My suggestions for ways to use this book are based on my belief that each of you is in a different place in your career and the context of your work may or may not be similar to anyone else. For those just starting in training and design, you may gain the greatest value with a complete read of this book to get a general feel for the relationship between SMEs and trainers. It will serve as a starting point for your more specific needs and interests. If you are an experienced professional, you may find that specific chapters—as outlined below—offer a new insight or approach to an existing challenge. You may find new job responsibilities that you hadn't considered before.

Everyone should read chapter 1. In this chapter, you will find important foundational information about SMEs and their roles in training. You will find out about the earliest SMEs and how they evolved to their important roles in today's training environment. There are five different types of SMEs in training, and you'll see why it is important to recognize these different roles when working with SMEs.

If you are responsible for selecting and managing SMEs, the information in chapter 2 will be key to making great SME selections and managing this vital resource. You will review the elements to look for in SMEs, and you can see how to rate the skills of individual SMEs with very objective data points, ranging from skill-specific elements to more general “ability to work in a team environment” elements. Don't miss this chapter if you want to find out what separates the average from the excellent in SMEs.

One of the most difficult assignments any trainer can face is the prospect of forming and managing a group of SMEs. Chapter 3 walks you through the three types of structures these SME committees generally take, and how to select leaders among your SMEs. Learn how to build a supporting environment for your SMEs that allows them to thrive while working with you.

One valuable element of working with SMEs that most novices miss is the importance of welcoming SMEs to a project and the world of training and design. Chapter 4 provides an overview of different elements in the process to consider, and offers examples of ways to do this effectively.

As your work with SMEs becomes more detailed, you will find value in acting on the need for role development within your SME groups. In chapter 5, you'll be able
to make sure that each SME knows the role she plays in the process, and how to ensure that your SMEs work well together in support of your project.

If you have ever worked on a training project where versioning, deliverables, and deadlines became a problem, you will find comfort in chapter 6, since working with SMEs and not having a plan for these issues only makes the problems exponentially worse. It is bad enough to have the wrong version of a deliverable if only one or two trainers are working with it. Imagine (or revisit) the problems associated with many SMEs all working on different versions of a deliverable. You will find useful ideas here for this universally challenging situation.

Most of us dread the idea that we have to evaluate someone’s performance and take action or make recommendations based on what we find. This often leads to a complete denial of this process and later negative consequences. In chapter 7, you will find a complete rubric of elements to consider when evaluating SME performance, including an objective-based rating scale. Some of you will find this interesting but not actionable in your situation, but knowing what to look for is useful, regardless of any eventual action on your part.

The more experienced reader will find the problem-solving elements in chapter 8 useful when you have SME issues that need to be addressed. These can be generated from some sort of evaluation process (either similar to the model in chapter 7 or one of your own design), or from complaints of other SMEs or training staff. This chapter helps identify some common problems you may experience, and offers suggestions for addressing them.

If you have ever felt the need to provide instructional systems development (ISD) training to your SMEs, chapter 9 is the place to start. Here you will find an outline for a boot camp-type training and also common questions and answers that many SMEs ask about the process of designing training. There is also a short glossary of training and ISD terms to share with SMEs.

Once you have given your SMEs a background on ISD and training, you may find some of these experts are interested in becoming more permanently engaged in the training process. Chapter 10 offers some ideas for supporting and nurturing SMEs who want to move to the world of training and design.

The final chapter in this book is a resource for all trainers and designers who work with SMEs. Chapter 11 is a series of “Dos and Don’ts” gathered from conversations with experienced trainers and instructional designers with more than two hundred
years of experience working with SMEs. The voices of SMEs who have offered their insight into being on the SME side are also reflected here.

When you are finished reading, I hope that you use this book as a desk reference for ideas and approaches as you work through your specific roles. One size does not fit all, and at no point would I ever recommend you simply accept my ideas without modifying them to fit the reality of your situation. Start here and take ownership of these ideas in your own unique way.
Chapter 1

The Subject Matter Expert’s Role in Training and ISD

Chapter Objectives

At the end of chapter 1, you will be able to:

• Define an SME in the context of the training environment.
• Describe at least three different roles SMEs play in training.
• List and describe the characteristics of five different types of SMEs utilized in training.

Chapter Overview

Defining what an SME is in the modern era of instructional design requires moving past the traditional ideas about SMEs. We can promote real progress by engaging and incorporating this important asset into our training family. Recognizing that SMEs exist in all disciplines—and that a content expert is the same as a graphic artist or programmer working on a project—opens unlimited avenues of cooperation and communication. The training professional who embraces this emerging concept reflects the new generation of practice that lifts instructional design to a new level of efficiency and standards.
SMEs

The single most misunderstood and mismanaged asset in training and curriculum development is the SME. From time immemorial they have proved an enigma to generations of training professionals. Like Professor Moriarty was to Sherlock Holmes, they may prove to be a constant riddle to our best instincts, yet they are irreplaceable in our work. They make us better trainers and designers in areas no other resource can even remotely hope to influence, while still nudging us toward a higher level of achievement in our broad role.

Some of my most satisfying work in training has been the countless hours spent in the company of really bright and energetic content professionals working on a project. Their energy and enthusiasm has buoyed me in times of doubt and supported me in times of less than brilliant decisions. They have also proved to be my biggest challenge, as their level of achievement and knowledge demand my best, and anything less is obvious to all involved. Through it all, you quickly learn that SMEs are no different from you. As a professional, you have certain expectations and admire certain qualities in others you work with. So it is with content experts, and so it has been for generations of trainers.

They have also proved to be my biggest challenge, as their level of achievement and knowledge demand my best, and anything less is obvious to all involved.

SMEs are certainly not a new phenomenon—far from it. For countless centuries, experts in every aspect of life and work have shared their knowledge with others in an effort to enlighten the less informed on every imaginable topic. From the earliest voices forging oral histories and telling stories, to the digital storytelling resident in social media, the passing of knowledge has been an admired and cherished endeavor from the beginning of recorded history.

Beginning roughly 32,000 years ago, the first recorded training consisted of cave drawings that depicted which animals were safe to eat. In this way, tribe members could consult the walls of the caves to learn from those who came before how to safely feed themselves. This passing of knowledge from an SME to a learner has changed little in the intervening tens of thousands of years.
When you think about it, it would be difficult to learn anything at all without someone sharing what they have learned with you and others. To paraphrase Isaac Newton, we all stand on the shoulders of giants when we gain new knowledge. All of this knowledge is passed to us by someone who has learned and shared that information to those who followed. It wasn’t until recently that we had a name for this knowledge sharer in the training world: SMEs.

Defining SMEs

As we begin our discussion of SMEs, we need to agree on how to define an SME and the roles they play in our training work. As you will soon see, there is no one single definition or type of SME. While most in our work of designing training are content-related SMEs, others are process-related SMEs, like writers and programmers.

SME is the universal designation for any individual who is considered to be an expert in one or more areas of endeavor. This expertise can be in content areas such as math or science, or a professional field such as law or accounting—or as we will see shortly, an SME can also be a key noncontent member of a training or instructional design team.

When we describe a content SME, or a technical subject matter expert (TSME), the term can accurately apply to a building trades crafts-worker with 40 years of experience hanging iron atop the world’s highest buildings, or a village elder with no formal education sharing centuries-old herbal treatments for common ailments. The 14-year-old next door is an SME in the latest musical genre, and a 92-year-old World War II veteran will serve as an expert on the Battle of Stalingrad, which happened in 1942. In all cases, the SME provides specific, detailed information that is not considered to be common knowledge among a general population. No two SMEs look the same or sound alike, and there may be no other defining element besides their related subject matter knowledge.

SMEs earn this standing in countless ways depending on the circumstances surrounding their knowledge. Some have years of experience in a field and have written articles or books, and may teach or offer seminars in a specific field. Others may be recognized by their peers as the “best of the best” and earn the SME title by virtue of their reputation. A minority of people are self-proclaimed SMEs and offer little in the way of credentialing to substantiate their expertise. It is also sometimes a subjective art to label someone (or yourself) as an SME. There is no group called the International Order of Subject Matter Experts that crowns the worthy few with this credential.
For our purposes in training, a TSME has generally passed the associated litmus tests within their field. This is often based on academic achievement, licensure and certification, publishing in the field, or some other formal credentialing process. There should always be an experience component to ensure that even the best educational credentialing is supported by years of actual practice in a field. In some professions, the yearly in-service training required to continue licensure or credentialing supports SME status.

The title of SME should not be given without credentials that match the practice among professionals in a specific area. Many times these are also the generally accepted entry points for professional practice. In academic circles, this is generally a terminal degree like a PhD or EdD. In law, it is a license to practice law and perhaps a JD degree. In medicine, it is a terminal degree like an MD or DO and board certification. In the building trades, this can be journey-person status and having many years of experience as an apprenticeship instructor. The examples go on and really have no limit. It is important that there is some tangible, reliable, and documented evidence to support “expert” standing.

The Genius Factor

There are notable exceptions to these common standards and accepted guidelines. Without question, we occasionally encounter uniquely gifted individuals who represent the outliers in this labeling process. Musical prodigies like Mozart or Chopin join Enrico Fermi in physics, Bill Gates in software design, and Steve Jobs at Apple, all of whom unquestionably defied accepted definitions of “expert” at some point early in their careers. To apply a strict, credential-based standard to any of these geniuses would be laughable, and yet there are still some who argue the “line in the sand” standard must always be supported. Be open to some reasonable interpretation of this definition in your work.

The Irony

As trainers and instructional designers, the irony in all of this is that we are also SMEs. We are SMEs in our chosen profession in the same way that our colleagues in other fields are content experts in theirs. It is the context that changes when we work with other content experts.

Rather than look at SMEs utilized during the curriculum design process as outsiders, it is a much more productive and mutually beneficial standard of practice to
think of everyone on a project as an expert SME. In this way, we all share the same professional space and remove any traces of boundaries or artificial barriers that affect our work and eventual success.

For this book, the terms SME and content expert are synonymous when referring to technical subject matter experts (TSMEs). However, not all SMEs are content experts, as you will soon discover. There are several other terms that cover the same semantic territory, and don't be surprised by some of the terms different groups use. They are all the same for our purposes, except in how we define the different subsets of SMEs, as you will see later.

**Why SMEs Are Important to ISD**

Often the term SME is tossed into a conversation as if it is just one single entity or function. As we have already discussed, it isn't, and the more you know about SMEs, the more important they become to your success. Best practice in ISD demands that SMEs take their rightful place as part of the design family with equal expectations and responsibilities as other people in the process.

The rapid maturation of instructional design over the last decade has curiously allowed a vacuum in the appreciation and integration of SMEs in the design team. This may be linked to a heightened focus on the key process elements of training and instructional design, whether represented by the ADDIE model elements of analysis, design, development, implementation, and evaluation—or other priorities, like online learning and social media.

This unenlightened view of SMEs is not intentional, but is nonetheless detrimental, since it minimizes the potential benefits of incorporating this asset where most useful. In a professional practice that strives on thoroughness and attention to detail, SMEs often languish as a disassociated element in the practice of ISD. In truth, they are often as essential to success as any other factor in our work.

**SMEs in Training Occupations**

It is difficult to find anyone associated with training and curriculum design who was not first involved in a non-training field, and by default, most likely an SME in something other than training and curriculum design. The same can be said for almost everyone holding the title of trainer, teacher, facilitator, professor, or various other coaching and mentoring roles. From the earliest oral traditions in education and training, skills and knowledge were passed from the most proficient to those following them.
Almost all academic programs teaching instructional design and learning and performance are offered to people who have experience in something other than training and education, and are now advancing their careers by learning more about the finer points of designing and implementing training. The ASTD Certified Professional in Learning and Performance (CPLP) certification is a perfect example of the transitional nature of skills in training from SMEs who work in a variety of professions to becoming a learning and performance SME. The University of Maryland Baltimore County Master’s degree and graduate certificate programs in instructional systems development do not have any requirements for prior experience or a specific undergraduate degree.

It is this path from SME to training role that has the potential to create uncertainty, since there are assumptions that someone who is good in one area of endeavor is also good in another. This questionable nexus between an individual’s content expertise and their more general training or instructional design knowledge invites conflicted role perceptions and opens the door to the possibility of dysfunctional committees, groups, and projects.

SMEs generally work and fit best in the role of an SME. To expect more of them is to invite a variety of potentially negative consequences. At the same time, when an SME attempts to expand their role into an area that interferes with established non-SME roles, it may create equally negative results. It is the balance of role and expectation that creates the best and most productive fit in this environment. So going beyond the simplistic one-size-fits-all definition for SMEs works to our advantage.

**SMEs Are More Than Just Content Experts**

The commonly accepted definition of the term SME is universally linked to an individual who has specific content knowledge in a defined field. We have SMEs in every imaginable content area, from alligators to zebras. This definition has served us well for thousands of years, but it is now time to move past this legacy view of SMEs in the field of training and instructional design.

As we have already learned, the term and classification of SME includes every professional partner in our training enterprise. Later in the chapter, we will see that SMEs are both content-related and process-related. The programmer, the writer, the teacher/trainer, and the manager are also SMEs in ways that matter in our work. Identifying and working with all of these specific types of SMEs provides endless possibilities for improved products and processes.
Imagine that you are designing a training program in one of the fields that a member of our training partnership represents. If you were designing a program for new writers, wouldn’t you have an established writer as an SME? And a new course in working with learning management systems (LMS) would need an SME in LMS design. And on and on. Once you start to think about all established professionals as SMEs, your mindset changes and opportunities arise to create better working relationships with this other SME family.

**Categorizing SMEs in Training**

You now know that in training the term SME encompasses many different roles and responsibilities, and this amalgamation renders the term almost meaningless without further clarification. When trainers experience confusion and frustration in their relationships with SMEs, it may at least partially come from the fact that we haven’t moved passed the stereotype to find the best fit for each different type of SME. Each project is different, as is each SME, but it is always worth the time to sort out what you have and figure out how to best utilize these talented professionals.

Given our need for clarity and avenues to efficiency and quality, it serves training best to define the primary categories of SMEs as technical, hybrid, instructional, functional, and sentinel. Each has a very distinct purpose and responsibility.

---

**Figure 1-1: Types of SMEs**

![Diagram of SME types](image)
**Technical SME**

If you asked a hundred trainers to define a generic SME, what a majority would probably describe is a technical subject matter expert (TSME). As the name implies, a TSME provides the technical component in training. Many times this individual is the seasoned professional who shares his knowledge of a particular area of specialty, and that becomes the core content in a course.

These are master craftspeople, engineers, scientists, lawyers, physicians, biologists, electricians, human resource professionals, or anyone who has a demonstrated subject matter expertise to enhance curriculum development. You may find your TSMEs don’t have a lot of experience with the training design process and are appointed to these positions with or without their knowledge or approval. It is often true that any assignments related to their role as a TSME are in addition to their regular job responsibilities, and this may become a point of contention. In other cases, TSMEs are consultants who work on many of these projects and are very familiar with their role and function.

The focus in this book is our work with TSMEs, but the same principles apply to all of our SME categories. We spend more time with this group than any other because this group is more common, and it is easy to apply all of our experience to each SME type.

<table>
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<th>Table 1-1: Technical SME</th>
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<tr>
<td><strong>Technical SME</strong></td>
</tr>
<tr>
<td>• content expert</td>
</tr>
<tr>
<td>• professional standing</td>
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<tr>
<td>• demonstrated expertise</td>
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<td>• design support only</td>
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**Hybrid SME**

In some training and education settings, numerous factors may require professionals to consolidate duties and engage in more than one training role. This hybrid subject matter expert (HSME) both participates in the design of a course and also implements the course once designed. This unique set of skills has its own challenges that must be recognized and addressed.

In higher education, the HSME is the rule rather than the exception, and HSMEs are generally stronger in content knowledge and weaker in designing courses. This
becomes especially noticeable when courses move online, either in a blended mix of online and classroom or in a full online course. It is a very difficult transition to move from designing courses based primarily on lecture and systematic evaluations to designing courses using ISD.

The HSME is also a very standard category when working with apprenticeship and other highly technical content areas. It is common for the best-skilled trade person to be brought in to teach others. This is how we gather most of our HSMEs for designing skills training.

### Table 1-2: Hybrid SME

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<th>Hybrid SME</th>
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<td>- content expert</td>
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<tr>
<td>- professional standing</td>
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<tr>
<td>- demonstrated expertise</td>
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<tr>
<td>- design and implementation</td>
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**Instructional SME**

The role of facilitator, mentor, coach, and teacher are all included in the instructional subject matter expert (ISME) category. While this group possesses vast subject matter expertise, their primary role is to enhance the instructional aspects of the training during implementation. It is not unusual for a technical course to be taught by an ISME that does not participate in the design, development, or management of the training. Still, their technical expertise is key to their ability to facilitate or enhance the learning experience.

### Table 1-3: Instructional SME

<table>
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<th>Instructional SME</th>
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<tbody>
<tr>
<td>- trainer/teacher</td>
</tr>
<tr>
<td>- implements design products</td>
</tr>
<tr>
<td>- content knowledge supports implementation</td>
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</table>
In multiple training environments, there are many SMEs who have little to do with building the content in a course, but contribute in ways that enhance the final product. While seldom involved in forming the content itself, their skills are unique to training and should be recognized as such.

A functional subject matter expert (FSME) might be a graphic artist, programmer, web designer, technical writer, photographer, or any other associated professional. The recognition of an individual’s expertise goes a long way in defining and building this role in the training function. We seldom think of these skills in the context of subject matter expertise, but they possess all of the qualities we seek in an SME, and to bring them into this discussion enhances our ability to build a winning training function.

Almost no one considers these professionals as SMEs in an instructional design context, and taking the time to consider the importance of the designation works to your favor. This group is proud of their work and they seldom get any recognition beyond the usual internal team appreciation. However, once you think of them as SMEs, you change the way you work with them in important ways.

As a group, they deserve the same respect and treatment as the content-related SMEs, and all of the ideas presented in this book apply equally to them in the context of their work and role in your project. Making them part of your team and not just an adjunct participating on the margins will bring tangible results over time. Don’t ignore this group and don’t take them for granted. They can negate any advantage you have gained with your other SME groups if they are left unappreciated and unrecognized as SMEs.

**Table 1-4: Functional SME**

<table>
<thead>
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<th>Functional SME</th>
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<tbody>
<tr>
<td>• support professional function</td>
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<tr>
<td>• graphic artist, writer, and so on</td>
</tr>
<tr>
<td>• no content knowledge</td>
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</tbody>
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**Sentinel SME**

In the world of training, the sentinel subject matter expert (SSME) is the individual who serves as the overseer or guardian of the content while designing and implementing
courseware. This individual may possess limited and often dated technical expertise, but he serves in the managerial role of reviewing and approving content related to design and implementation of the final training product.

They are considered SMEs because they ensure that the content and product meet—and hopefully exceed—expected professional and organizational standards. And, while their content-specific knowledge might be limited, they still have the organizational responsibility to act as sentinel for both content and process. In training and instructional design, the SSME must be treated differently than any other participant in the process. Their knowledge of the content places them in a unique organizational situation: They may experience pressure from several directions when making important decisions, since those they report to might have priorities different from those related to training and to their role as an SME.

This group can be especially challenging, since their first priority is not necessarily the content. In most cases they are concerned with budget and deliverables rather than with specific content issues of the designed material. They will endlessly churn the most miniscule budget item, and they want answers when a deadline is missed. While genuinely concerned about the content, they have higher authorities to appease, and those authorities have limited knowledge of project and process details. When working with this group, make sure you have all of your facts in order and make sure you have answers for even the smallest details related to budget and deadlines.

SSMEs really appreciate and respond to having tangible items to review and share with those higher in the organizational food chain. As professionals, they have grown weary and suspicious of anything they can't see or hold in their hands. Trying to float something by this group is impossible. Have copies of every deliverable ready for them to review. Make sure they have timelines and budgets ad nauseam, and always appear to have much more information for them than they will ever have time to review.

Another helpful approach in working with this group is to have TSMEs talk about their work and share insights on how the project is going (assuming it is going well). SSMEs really pay attention when the SMEs that they have assigned to work on a project talk about their success. This allows the SSMEs to take away a feeling of accomplishment, and they can then float this success higher in the organization.

Of all of the SMEs you work with, this group above all others has to feel comfortable with your leadership and the investment they are making in a project. If they are happy, most other levels of the process will respond positively to your facilitation—if
for no other reason than because they know the sentinels are satisfied with the way things are progressing.

Table 1-5: Sentinel SME

<table>
<thead>
<tr>
<th>Sentinel SME</th>
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</thead>
<tbody>
<tr>
<td>oversieves course design from a distance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>limited or dated content knowledge</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>assures quality and related organizational concerns</td>
<td></td>
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Matching SME Types and Your Needs

Categorizing subject matter expertise provides several advantages in training, not the least of which is the ability to find the best and most efficient way to incorporate these valuable assets in each individual training environment. It’s really a matter of respect and appreciation for the time and effort that these professionals invest in making our training successful.

In order to best utilize our valuable SMEs, we need to first identify what we need from them and when we need it. Using the ADDIE model of ISD (more in chapter 9) as our guide, there are certain elements of the process that best suit themselves to the different types of SMEs.

In table 1-6, we can see that each element of ADDIE has a specific need for SMEs. Each classification of SME will likely fit best within particular ADDIE elements. While each project is different, these are generally appropriate associations.

Table 1-6: SMEs and ISD Elements

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Design</th>
<th>Development</th>
<th>Implementation</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Hybrid</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Instructional</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Functional</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sentinel</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

As we review this table, we can see that technical SMEs are generally used in analysis and evaluation, since these require the most content-specific resources. Functional
SMEs are most likely only used in the development within a course, and instructional SMEs are going to be used in the implementation and evaluation phases. Hybrid and sentinel SMEs are likely to be useful in all of the ADDIE elements.

If we are able to determine when we will need different types of SMEs, we can accomplish several things at once. First, we will be able to quantify the amount of time each of these experts will need to be plugged into the process. A resource may become overwhelmed if she thinks her time and effort is necessary for the whole design process. This allows us to better define what we ask an individual to contribute, and it allows each individual to gauge the scope of her participation.

Second, we are able to plan our project with a more realistic timeline, plus a resource and cost model that reflects real-world asset allocation. A department head considering whether to allow an SME to work on a project at a 5-10 percent time allocation may be much more likely to participate if he thinks this is not an open-ended commitment with undefined limits.

Conclusion

As we dig deeper into our relationship with SMEs, we will explore different areas that perhaps you have not thought about or have not experienced in your work. This is a very complex topic, and there has been only a smattering of superficial information and suggestions offered to support the building and maintenance of these important relationships. Starting with knowledge that even the designation of SME can have multiple meanings builds a great foundation for important conversations about our partners in training: the SMEs.
Discussion Questions

1. How would you define an SME? Do you think there is more than one type of SME?
2. Is it useful for trainers and instructional designers to work with various types of SMEs differently?
3. Do you consider yourself an SME? If so, in what fields?

Case Study Question

You are managing a project that contains several different types of SMEs. It has become obvious that no one has taken the time to identify the types of SMEs the project requires, or has thought about what the differences mean in terms of completing the project successfully.

What do you think is the best way to approach this issue, and what would you do first?